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TRENDS AND PROSPECTS: DECIDUOUS FRESH FRUITS

Sidney Hoos and Varden Fuller

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April 1955

University of California
Division of Agricultural Sciences
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FOREWORD

This report was prepared at the request of the California Grape and Tree Fruit League which is concerned primarily with fresh deciduous fruits. For that reason, the report is oriented in considerable part to developments as they bear upon deciduous fruits, particularly the trends in fresh disappearance in relation to population and income trends.

In view of the marked growth in national population and income during the past two decades, with prospects for further expansion, the deciduous fresh shipping industries are concerned with the changing situation as it affects their operations and their prospects. The materials presented here, rather than being forecasts, should be viewed as benchmarks and background against which the fresh deciduous fruit industries may set projections. Whether the current trends in per-capita disappearance of fresh deciduous fruit will continue or reverse their direction is highly significant to these fruit industries.

In the preparation of the report, the authors were aided with general assistance from George Viles and Mrs. Eleanor Birch; the charts were prepared by Mrs. Kathryn C. Eardley, and the manuscript was prepared for processing under the direction of Mrs. Viola Jank.

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TRENDS AND PROSPECTS: DECIDUOUS FRESH FRUITS

Introduction and Summary

It is well known that California is the leading producer of deciduous fruits. The dominant position of the state is indicated by the fact that in recent years close to 50 per cent of the nation's total tonnage grown for all uses of apples, apricots, cherries, grapes, freestone peaches, pears, and plums--the fruits considered in this report--have been grown in California. The state's relative position in those fruits now is even greater than in the prewar years; in 1934-1938, California accounted for about 40 per cent of the nation's total production of those seven deciduous fruits. They include all the major deciduous fruits except clingstone peaches, which are primarily canned, and prunes, which primarily are dried. Since this report is, in the main, concerned with developments in deciduous fresh fruit, clingstone peaches and prunes are not dealt with here.

In view of the marked expansion during the past two decades in the nation's population, over-all production, and money income, the deciduous fresh fruit industries are faced with the problem of evaluating their changing situation in the light of national developments. To provide a basis for such evaluation, this report presents and reviews trends reflecting some major changes of importance to producers and distributors of deciduous fruits. As the changing situation is reflected by developments in California, some significant high lights may be summarized by comparisons of prewar and recent postwar years in the table below.

Prewar (1934-1938) to Postwar (1949-1953) Changes in California Production and Marketing of Various Deciduous Fruits[a/]

	1934-1938	1949-1953	Percentage change from 1934-1938 to 1949-1953
	annual averages for five-year periods		per cent
Production (1,000 tons)	3,012.1	3,825.4	+27.0
Bearing acreage (1,000 acres)	732.1	647.9	-11.5
Yield (tons per bearing acre)	4.1	5.9	+43.9
Fresh sales (1,000 tons)	853.5	975.2	+14.3
Fresh sales as per cent of total sales (per cent)	28.4	25.6	- 9.9

a/ Includes apples, apricots, cherries, all grapes, freestone peaches, pears, and plums.

It is well known that California is the leading producer of deciduous fruits. The dominant position of the state is indicated by the fact that in recent years close to 50 per cent of the nation's total tonnage grown for all uses of apples, apricots, cherries, prunes, freestone peaches, pears, and plums--the fruits considered in this report--have been grown in California. The state's relative position in these fruits now is even greater than in the former years, in 1938-1939, California accounted for about 40 per cent of the nation's total production of these seven deciduous fruits. They include all canned, and prunes, which primarily are dried. Since this report is, in the main, concerned with developments in marketing fresh fruit, although some dried prunes are now dealt with here.

In view of the marked expansion during the past two decades in the nation's population, over-all production, and money income, the deciduous fruit industries are faced with the problem of evaluating their changing situation in the light of national developments. To provide a basis for such evaluation, this report presents and reviews trends affecting some major changes of importance to producers and distributors of deciduous fruits. As the changing situation may be summarized by comparisons of prewar and recent postwar years in the table below.

Prewar (1925-39) to Postwar (1945-1951) Changes in

			Other 1925-39 to 1945-1951
Production (1,000 tons)			
Bearing acreage (1,000 acres)			
Yield (tons per bearing acre)			
Index numbers (per cent of			

Between 1934-1938 and 1949-1953, California production of the seven deciduous fruits considered in this report increased by 27 per cent. This expanded production was obtained from a bearing acreage which had decreased by almost 12 per cent because yields increased very substantially--almost 44 per cent. California's 27 per cent increase in production occurred when that for the nation at large, for the same fruits in total, increased less than 7 per cent.

Along with the increased production, the total tonnage sold fresh, of the seven deciduous fruits reviewed here, also increased. But the expansion of California fresh sales between 1934-1938 and 1949-1953 amounted to 14 per cent compared with its 27 per cent increase in total production, indicating that California sales for fresh use expanded relatively less. Another way of emphasizing that change between the immediate prewar and the recent postwar years is noting the fact that, while California fresh sales amounted to about 28 per cent of total sales as an annual average for 1934-1938, the fresh proportion averaged near 25 per cent for 1949-1953. Yet, this decline in the relative position of the fresh market was even proportionately greater for the nation at large than for California. From the national view, 56 per cent of the total deciduous sales went to the fresh market during 1934-1938 compared with 47 per cent for 1949-1953. Thus, the California fresh sales in relation to total sales, for the seven deciduous fruits considered, shrunk less than for the country at large.

The shrinking relative position of the fresh use of the deciduous fruits summarized above is a broad generalization concerning these fruits as a group. The situation in each individual fruit differs in many respects and, for that reason, the developments in each of the fruits are reviewed separately in following sections of the report. Yet, the fact remains that these fruits compete with others, to some extent, in fresh use and also with processed fruits. The outcome of this competition for the consumer's attention involves many influences, some of which are peculiar to particular fruits and some of which are common to all of them.

Among the national influences which affect all of the fruits, and which have changed substantially during the past two decades, are population and income. The upsurge in the national birth rate after 1940, yielding a rapidly expanding population, along with the expanded national income, has resulted in a drastically changed market situation as measured by numbers of potential consumers with favorable disposable incomes. The prewar to postwar changes of that type are summarized in the following table with over-all indicators of the national disappearance of the deciduous fruits under discussion here.

Prewar (1934-1938) to Postwar (1949-1953) Changes in United States Population, Income, and Disappearance of Various Deciduous Fruits[a]/

	1934-1938	1949-1953	Percentage change from 1934-1938 to 1949-1953
	annual averages for five-year periods		per cent
Per-capita total disappearance (pounds per year)	93.4	93.9	+ 0.5
Per-capita fresh disappearance (pounds per capita)	58.6	46.2	- 21.2
Per-capita products disappearance (pounds per capita)	34.8	47.7	+ 37.1
Population (millions--eating out of civilian supplies)	129.8	153.8	+ 18.5
Disposable income (billions of dollars)	62.6	221.5	+253.8

a/ Includes apples, apricots, cherries, grapes, freestone peaches, pears, and plums.

The above averages not only suggest a striking story but also reflect some perplexing problems facing the fresh deciduous fruit industries. Compared with the immediate prewar years, per-capita total disappearance (including use of grapes in all forms) in the recent postwar years has remained about constant. But the average per-capita disappearance through fresh use has decreased by more than 20 per cent and, during the same period, the per-capita disappearance through products (canned, dried, juice, etc.) has increased by 37 per cent. This relative decrease in fresh use per capita, or relative increase in products use per capita, occurred during a period when national population expanded 18 per cent and disposable money income increased 254 per cent.

One obvious question is, why has the relative shift from fresh use to products occurred? Each person, on the average, has consumed about the same total amount of the deciduous fruits in all forms in recent years as in the immediate prewar years. But each "average consumer" recently has bought less fresh deciduous fruit and more processed deciduous fruit. Two important factors which need be considered are the relative prices and consumer tastes and preferences.

	37.3	92.5	+ 0.5
	49.1	44.5	
	31.8	44.7	+ 17.1
	120.6	183.0	+ 19.5
	69.6	221.5	+219.8

During the recent postwar years, compared with the years shortly preceding the war, the prices of deciduous processed fruits have averaged under the prices of deciduous fresh fruits. Adequate data at the retail level are not available, but prices received by growers are suggestive of the situation. For the seven deciduous fruits considered here, the over-all average price received by California growers from the fresh outlet in 1934-1938 was $27.72 per ton compared with the average of $81.38 per ton for 1949-1953; and for the processed outlet, the average price was $17.77 in 1934-1938 compared with $46.52 for 1949-1953. Thus, between 1934-1938 and 1949-1953, the fresh-use price increased nearly 195 per cent, while the processed-use price increased about 160 per cent. These averages include grapes as one of the seven fruits. When grapes are excluded, because of their large proportion used for crushing into wine and drying into raisins, we find the 1934-1938 average price received by California growers from the fresh market to be $35.62 per ton compared with $113.52 per ton as the average for 1949-1953; the processed-use average price for 1934-1938 is $27.62 per ton compared with $69.48 for 1949-1953. Hence, when grapes are excluded, there results an increase of about 220 per cent in the fresh-use price and an increase of about 150 per cent in the processed-use price. The data, thus, indicate that in recent years the prices of deciduous processed fruits have risen less, compared with prewar, than have the prices of deciduous fresh fruit. This broad generalization applies to deciduous fruits as a group, and each of the fruits has had different experience. But it is reasonably clear that one of the reasons consumers have shifted from fresh to processed deciduous fruits may well be that, in terms of relative prices, deciduous processed fruits have been more attractive during recent years than in the prewar years.

Aside from the question of relative prices, there also is the question of consumer tastes and preferences which are difficult to evaluate in measurable terms. It may be that with changing modes of living, including kitchen changes, working mothers, shopping conveniences, desire for recognizable branded goods, quality improvement in processed products, and other factors among a host of institutional influences all have combined so as to change what are referred to as consumer tastes and use preferences. After all, the buyer's taste and use preference is not a static unchanging factor.

Although the standardization, packaging, distribution, and merchandising of deciduous fresh fruits have changed somewhat in recent years, such change has been moderate when compared with marketing developments for deciduous processed products. It is only within very recent years that deciduous fresh fruit has to

any measurable extent been the recipient of large-scale intensive merchandising and advertising of the type which has for several decades been characteristic of, say, canned deciduous fruits. Although it cannot be definitely proven to be a fact, inferences from bits of evidence suggest that one of the reasons per-capita use of deciduous fruit has been shifting from fresh to products is that consumers at large are increasing their use preference for the products and decreasing their use preferences for the fresh. Yet, the current situation is not inevitable and may well be changed. Such a reversal, however, rather than being self-inducing or autonomous, is more likely to come about as a result of organized, persistent, and adequate efforts on the part of deciduous fresh fruit industries.

The historical trend of United States population is sketched in a following section of this report. There will be noted that up to and through the 1930's the nation's population grew at fairly constant rate. Decreased mortality of infants and increased longevity were evident, yet, the important influence of birth rate was deemed to be reliably predictable. Prior to 1940, when birth and death rates were fairly stable but slowly declining, the estimation of population growth for the country was deemed to be primarily a matter of trend projection. But the unexpected upturn in births after 1940 raised doubts about future population trends and the predictability of human behavior, particularly that relating to reproduction. Many observers rushed to generalize a greatly altered population outlook.

Actually, the spurt in births since 1940 reflects an earlier and more thorough exploitation of human reproductive capacity, by earlier marriages and earlier childbearing within the marriage. There is no conclusive evidence yet of an upward revision in completed family size. Unless the concept of the complete family has undergone a radical upward revision, the number of births will be lower from now on until around 1965 because the current generation of mothers comes from the low births of the 1930's. But if the concept of the complete family has undergone a radical upward revision, then the number of births from now on will remain high as in recent years and even increase more. On the other hand, if a serious business depression were to develop and the delayed marriage and childbearing pattern of the 1930's were to reappear, then a temporary dampening effect on population growth would occur, only possibly to be followed by another population explosion in the wake of business recovery. Thus, it may well be that rather than being characterized by stable and slowly changing birth rates, as our population growth had been in earlier years, we would have now entered a

phase of variable or irregularly cyclical patterns of birth rate and attendant effects on the rate of population growth.

Other than that total population will probably continue to increase, little else can be said with confidence. Population experts really do not know what will occur with respect to birth rates, and they do not know whether the current relatively nigh birth rate will continue or recede to its earlier levels. But the fact that total population can be expected to increase is, in itself, of importance. In terms of the number of potential consumers of deciduous fresh fruit, the future appears to be favorable. Whether the potential consumers will be effective demanders will depend upon the level of their disposable income, relative prices of other commodities, and their tastes and use preferences.

As to the outlook for the level of disposable income, the situation is also sketched in a later section of the report. In this bird's-eye summary, it need only be noted that the supposedly informed believe that national production and disposable income will continue their robust upward march. Those who have made serious studies agree that the production and income outlook for 1965 and on to 1975 is highly favorable. This, of course, does not rule out interim and temporary recession setbacks along the way. But from the longer view, the national income outlook is anticipated to be relatively high so as to support raised levels of living.

Concerning the long-term outlook for relative prices of fresh and processed deciduous fruits, no forecast, of course, can be made. Yet, as we gather bits of evidence and construct inferences, they suggest that the fresh-use industries may well be faced with the problem of declining relative prices in the products utilization. So far, the technological developments leading to cost reductions have been more pronounced in the processed use than in the fresh-use industries. The scope and method of cost reduction in various branches of the deciduous fresh-use industries are likely to require intensive investigations and developments which are more comprehensive and revolutionary than have yet emerged, if a highly significant change in relative cost positions is to be attained.

When the long-term outlook for consumer tastes and use preferences is considered, it becomes even more difficult to formulate rational conjectures. Consumer tastes and preferences are a part of consumer behavior of which very little is known. What is known is that consumers, in mass and as an unorganized group, undergo changes in their ideas. Consumer behavior, including attitudes about tastes and use preference, is no respector of statistical trends. With attractiveness, in terms of flavor and keeping qualities as well as appearance, deciduous fresh fruits can receive increased preference by consumers.

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Recent technological changes, or the absence thereof, may very well have had considerable influence on consumer preferences. In the processed field, important changes are occurring which bear upon the demand for fresh fruits. It is not an exaggeration to note that cold pasteurization and sterilization of foods by irradiation on a commercially feasible basis may be near at hand. Reports indicate that mild doses of irradiation adequate to pasteurize will increase the keeping qualities of various foods, including fruits, without affecting quality, taste, or flavor. If, or more likely when, a commercially feasible irradiation process for foods is developed, there could well be the effects of a revolution in the food canning and processing industry. The Committee on Foods of the National Research Council, of the Academy of Sciences, reports its view in the following terms: "no other method of preservation of foods is so far advanced, appears to offer greater possibilities, or is as economically feasible as is the radiological sterilization method in its present state of development."

It appears clear that the fresh-use fruit industries can expect more intensive competition from the processed fruit industries with such competition being in terms of product characteristics as well as price. Yet, it may well be that the fresh-use industries can also take advantage of technological developments as cold pasteurization and radiological sterilization. Rationalization of packing house locations and layout with cost-reducing methods of operation, the harvesting of tree-ripened fruits at their optimum flavor and eating stages, and with those fruits being irradiated at the peak of their flavor could result in fresh shipping fruits having reduced perishability yet with optimum quality and attractiveness to the potential consumers. The essential point is that fresh-use fruit industries can also take advantage of technological advances so as to improve or at least maintain their competitive position.

The following sections of the report set forth the statistical and interpretative materials underlying the preceding summary. The next section reviews the comparative trends in the seven deciduous fruits surveyed, and the third section considers the developments in each fruit separately. The fourth and final section is concerned with factors affecting long-term demand prospects as population, income, and consumer behavior. The statistical tables in the appendix include the basic data on which are based the text tables, charts, and discussion.

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and discussion.

TRENDS IN DECIDUOUS FRUITS

The facts that both national income and population of the country have expanded at a substantial rate during the past two decades are set forth and discussed in another section of this report. There also are discussed the outlook and prospects for further growth in national income and population. In view of such prospects, there arise questions concerning the changing position of deciduous fruit production and marketings.

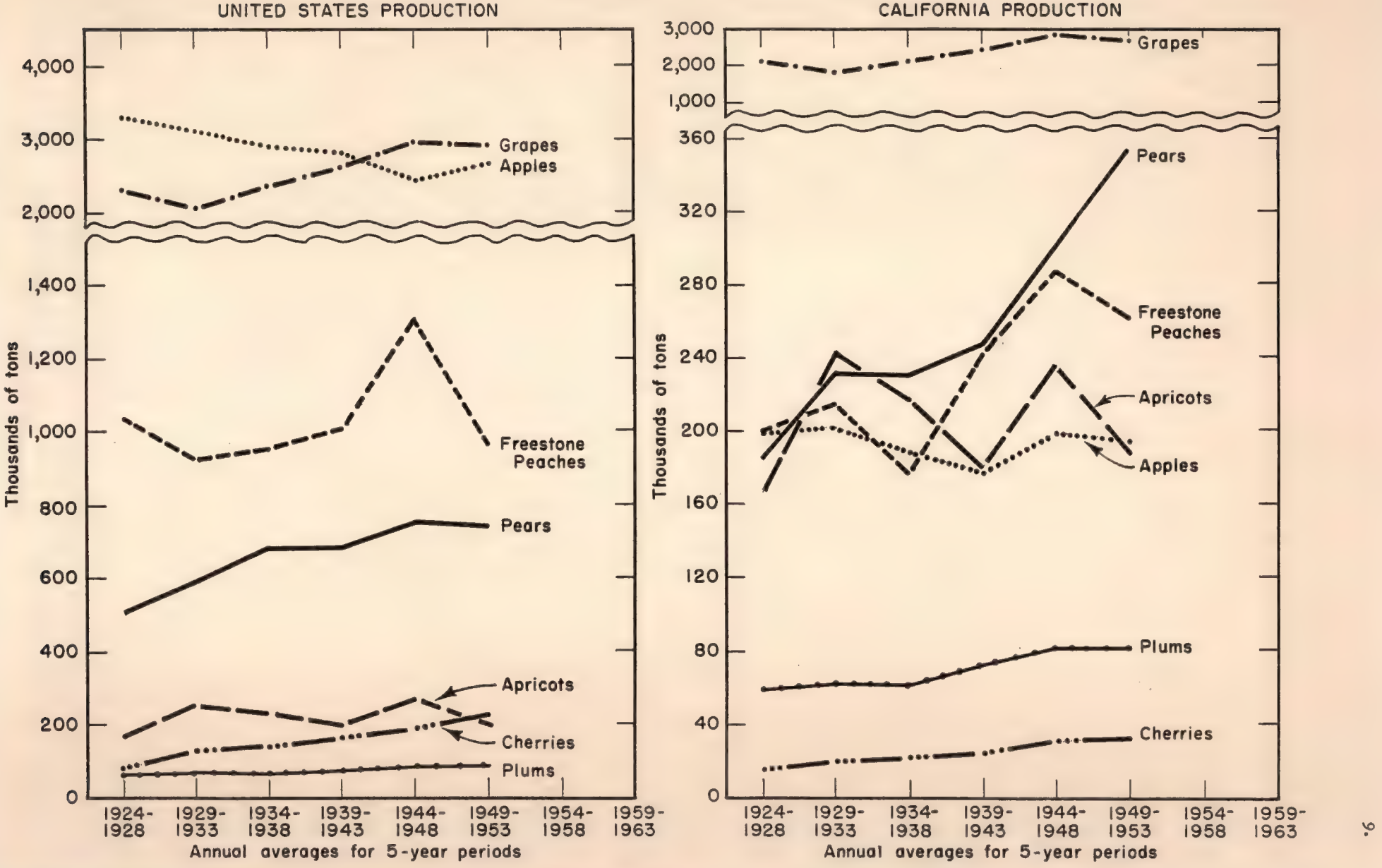
Questions of interest include what have been the trends in production, acreage, and yield? What have been the trends in grower prices and in grower sales for the fresh market in contrast with total sales? What have been the trends in per-capita "consumption," total and fresh use? To what extent have the per-capita consumption rates of the various major deciduous fruits continued to expand with the nation's population and consumer income? It is with these broad questions that this section of the report is concerned.

Rather than being concerned with details of particular years, here we are interested in taking a broad over-all look at production and marketing developments in deciduous fruits. For that purpose, we use the trends of five-year averages. Such averages cancel out the peculiarities of individual years and clearly set forth the basic underlying trends in which we are interested. Yet, it always should be borne in mind that behind the five-year averages and their trends are the facts of the individual years and seasons which growers and shippers experience in their operations. For those who are interested, the statistical data of the individual years are included in tables at the end of this report.

Before beginning a review of particular trends, it may be noted that the major interest of this report is oriented in the direction of setting forth developments in the marketings of deciduous fruits for fresh consumption. The materials on production, acreage, yield, and farm sales are presented as background to supplement review of developments in fresh marketings and particularly per-capita consumption of fresh deciduous fruits.

Production.--The levels and trends of deciduous fruit production are pictured in Figure 1, with one panel for national production and the other panel for California production (note the different vertical production scales in the two panels). By reference to the figure or the data below, one may obtain a comparative view of the differing production trends in the various deciduous fruits.

FIG. 1 PRODUCTION OF VARIOUS DECIDUOUS FRUITS



Production of Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; thousands of tons					
Apples	U.S.	3,278.7	3,108.2	2,895.9	2,817.2	2,443.6	2,661.7
	Cal.	197.1	201.7	188.4	176.7	198.4	194.1
Apricots	U.S.	168.6	248.6	229.6	201.0	265.9	202.9
	Cal.	167.4	242.8	216.0	179.4	235.4	187.6
Cherries	U.S.	83.1	125.6	139.7	166.3	191.2	231.1
	Cal.	14.8	19.8	21.3	23.6	30.1	32.3
Grapes	U.S.	2,320.5	2,072.4	2,346.0	2,600.2	2,936.2	2,912.2
	Cal.	2,085.2	1,782.8	2,118.6	2,394.8	2,772.4	2,716.6
Freestone peaches	U.S.	1,039.4	933.2	954.1	1,106.9	1,305.6	962.0
	Cal.	200.0	213.8	177.0	241.0	287.4	260.8
Pears	U.S.	509.5	588.9	682.9	683.9	749.1	736.5
	Cal.	185.0	229.6	230.2	247.4	300.4	353.4
Plums	U.S.	64.7	68.4	65.1	76.4	87.2	87.6
	Cal.	59.0	62.4	60.6	71.8	80.8	80.6

During the past three decades, the national production of apples trended downward until the latter half of the 1940's. Since then, some recovery has developed, although the production level prior to the 1940's has not been regained. In terms of commercial tonnage, apples rather than retaining their lead position of long standing have, in recent years, been second to grapes.

While national apple production has receded over the years, apple production in California has recovered sufficiently during the past decade so that the current average level is only slightly under that prevailing during the 1924-1933 decade. Thus, in terms of long-term trend, apple production in California has fared better than in the country at large to the extent that no significant downward trend is characteristic of California apple production. In California, however, apple production is not as relatively important (in terms of tonnage) as for the country at large as is seen in Figure 1.

When apricot production is considered, attention may be confined to California where practically all of the commercial production is grown. As is well known, apricot production fluctuates widely, and even the use of five-year averages results in a sharply broken trend line as pictured in Figure 1. Visualizing a smooth trend for apricot production, one notes that the imaginary long-term trend is just about horizontal. Thus, the so-called average level of apricot production has been maintained over the years. Apricots, hence, may be grouped with California apples in that both display, in broad terms, long-term production trends which have neither risen nor declined significantly.

There are differences between sweet and sour cherries and those grown primarily for fresh shipping in contrast with processing. But it is of interest that in both California and the nation at large, including a mixture of sweet and sour cherries, the production trends have been consistently upward. Yet, it should be noted that the rate of growth has been less in California than for the nation. Whereas national production of cherries almost tripled between 1924-1928 and 1949-1953, the California production during the same period slightly more than doubled.

Because of California's leading position in grape growing, the production trend of this state dominates that of the country. From Figure 1 may be seen the extent to which the grape tonnage in California surpasses that of the other fruits. Also, it may be noted that during the past decade the national production of grapes has surpassed that of apples.

Grape production, for all uses combined, trended upward after the decline from 1924-1928 to 1944-1948 and, since then, the trend has been almost level with only a slight decrease. These broad generalizations apply to California grapes and those for the country at large.

Next we consider the production trend in freestone peaches as summarized in Figure 1. Differences are apparent in California compared with national production of freestones. In California, the production trend increased and then decreased between the 1924-1928 and 1934-1938 decade. Then a sharp upward trend occurred during the next decade. But production in 1949-1953 averaged under that of the previous five years.

National average production of freestone peaches declined from 1924-1928 to 1929-1933, then rose somewhat during the next decade with a sharp rise from 1939-1943 to 1944-1948 when the peak also occurred in California's production. And, also, as occurred in California, national freestone production dropped between 1939-1943 and 1944-1948, with the national decline being much more sharp

than what occurred in California. From an over-all view during the past quarter century, California production of freestone peaches has trended upward, whereas national freestone production displays no such over-all upward trend.

With pears, also, the California production trend has differed from the national trend, both shown in Figure 1. The national trend increased first moderately then at a slower rate, with no increase occurring during the past five years. In contrast, California production of pears first trended upward sharply during the 1924-1928 to 1929-1933 period and then only moderately during the next decade. But within the past decade, production of California pears rose sharply and in 1949-1953 averaged at a record-high level. California pear production more than doubled during the past quarter of a century, whereas national production increased some 50 per cent.

As we turn to the production trend of plums pictured in Figure 1, we note a level trend during the 1924-1928 to 1934-1938 decade followed by an upward trend during the next decade. And during the past five years, the average production trend has been about level with no apparent significant change. Recent production has been about one third higher than in 1924-1928.

Acreage.--To review the determinants of production trends surveyed above, we now turn to acreage and yield trends. First, we call attention to the summary data in the following tabulation.

Bearing Acreage of Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; thousands of bearing acres					
Apples	U.S.	2,300.3	2,093.9	1,821.2	1,500.3	--	--
	Cal.	51.6	44.9	38.4	33.4	31.0	25.6
Apricots	U.S.	74.1	84.7	80.2	74.5	--	--
	Cal.	74.1	81.3	75.7	69.3	66.1	45.9
Cherries	U.S.	73.0	89.3	106.1	105.8	--	--
	Cal.	10.2	13.1	14.5	13.3	12.1	9.5
Grapes	U.S.	731.6	730.9	657.8	627.1	--	--
	Cal.	543.6	530.4	481.3	486.6	495.0	471.6
Freestone peaches	U.S.	677.4	621.7	572.7	576.5	--	--
	Cal.	56.9	52.2	41.1	37.5	39.7	32.3
Pears	U.S.	229.5	236.8	212.1	181.6	--	--
	Cal.	52.8	65.8	55.4	45.2	43.7	39.6
Plums	U.S.	33.1	34.1	29.4	24.9	--	--
	Cal.	28.3	30.2	25.7	22.0	23.5	23.4

As to national bearing acreage, only a few words are in order since reliable data for the last decade are not available. For all the fruits, except apricots and cherries, national bearing acreage declined, more sharply for apples, grapes, and freestone peaches than for plums, during the period ending 1939-1943. When we consider California bearing acreage, however, a more complete picture may be shown as in Figure 2.

The long-term trends in bearing acreage of California deciduous fruits, reflecting developments during the past quarter of a century, are set forth in Figure 2. In many respects, nothing further may be said since in none of the fruits considered has bearing acreage trended upward over those years as a whole. The greatest acreage decline was in grapes, followed by apricots, then apples, freestone peaches, pears, and plums. Yet, from these reduced bearing acreages has come the generally increased production noted earlier. The reason is higher yields, but before reviewing yield trends, we pause to consider developments in nonbearing acreage.

The trends in California nonbearing acreage are pictured in Figure 2. It may seem that the trends for the various fruits differ in various ways. But there appears one common feature. In none of the fruits is the nonbearing acreage as high as 25 years ago. And in none of the fruits has there been a marked upward surge in nonbearing acreage in recent years, although some increase has occurred in California apples and cherries. In consequence, there is little basis for expecting a marked increase in bearing acreage during the next few years. From the longer view, however, nonbearing acreage could expand and foreshadow an increase in bearing acreage.

Yield.--The various deciduous fruits during the past three decades have had much in common experience with respect to yield per bearing acre, although certain differences are noticeable. The historical record for the period under review is summarized in the tabulation below with the California yield trends pictured in Figure 3.

For all of the deciduous fruits, average yields have trended upward. Particularly outstanding have been the rise in yields for pears, freestone peaches, apples, and cherries. From 1944-1948 to 1949-1953, some increase occurred in grapes but none in plums.

It is clear that increased yields per bearing acre have been the underlying cause of the increased production trends noted earlier. Why yields have risen over the years, and very strongly for most of the deciduous fruits, encompasses a complex set of influences. Some of these, undoubtedly, are changing age distribution of the trees with a shift toward mature bearing capacity, technological

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FIG. 2 BEARING AND NONBEARING ACREAGE OF VARIOUS DECIDUOUS FRUITS IN CALIFORNIA

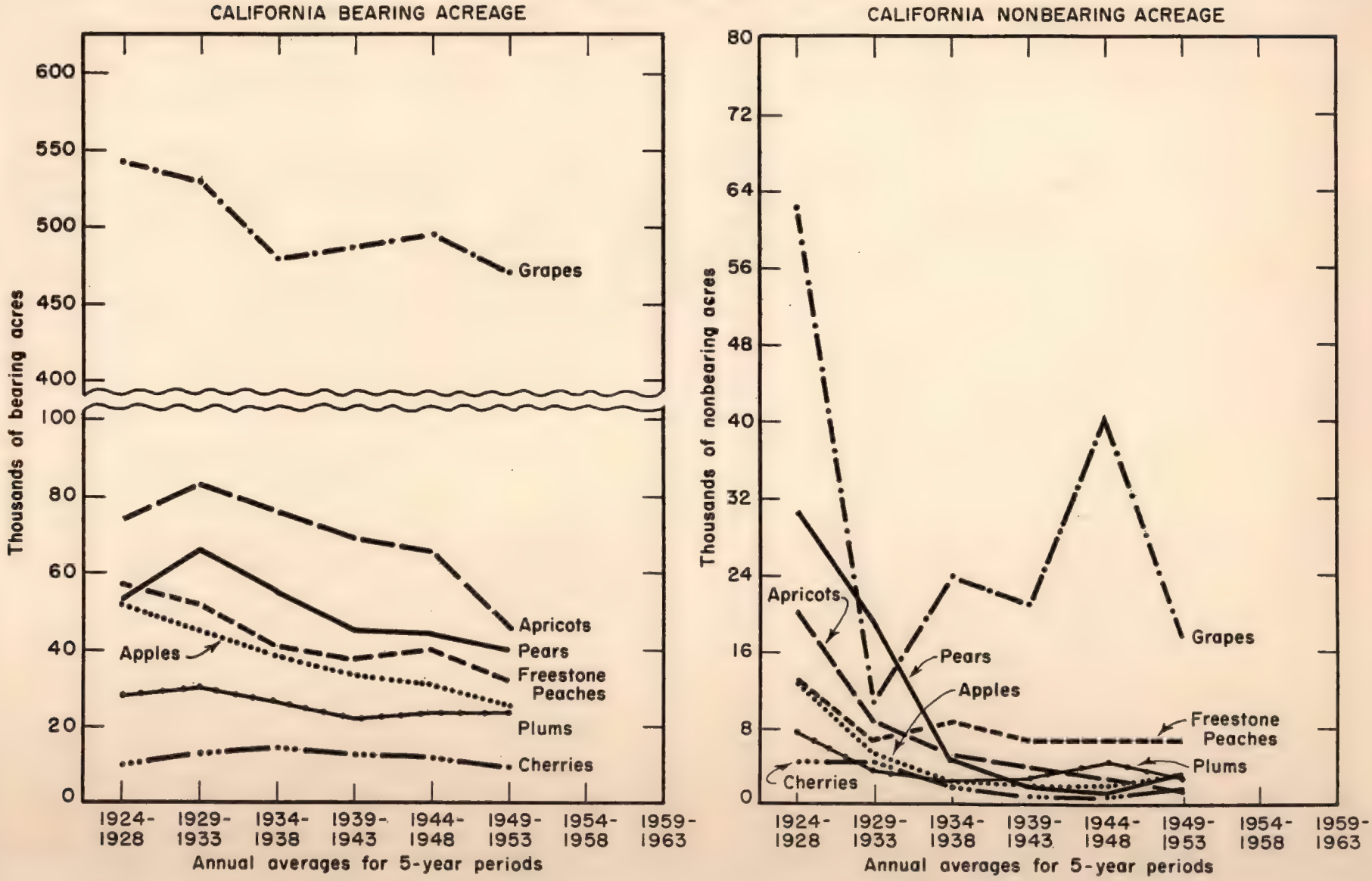
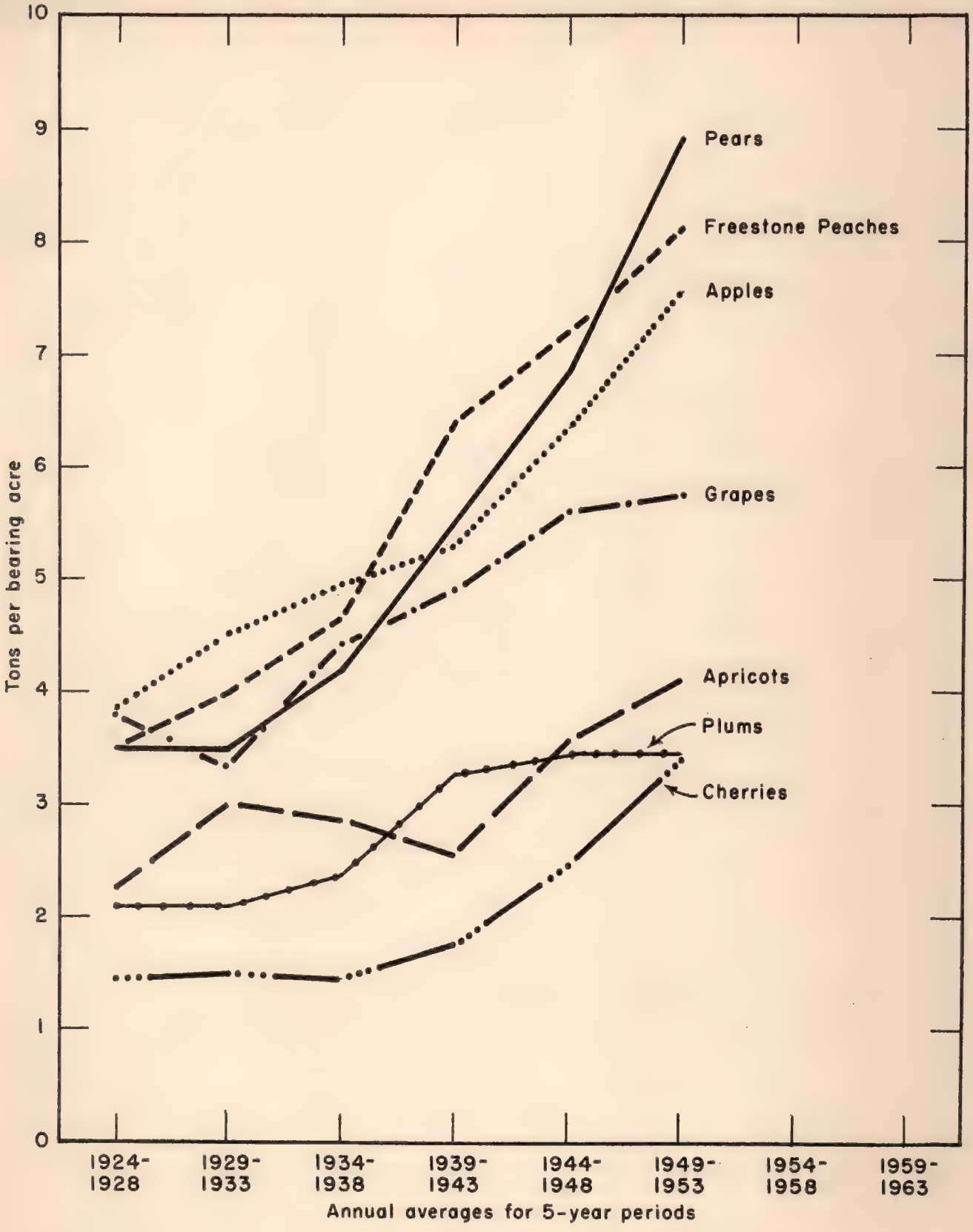


FIG. 3 YIELD PER BEARING ACRE OF VARIOUS DECIDUOUS FRUITS IN CALIFORNIA



advances, including more effective spray materials, and these in combination with improved management and cultural practices. Future yields obviously cannot be predicted with certainty, but one finds it difficult to doubt that further yield increases can and will be experienced.

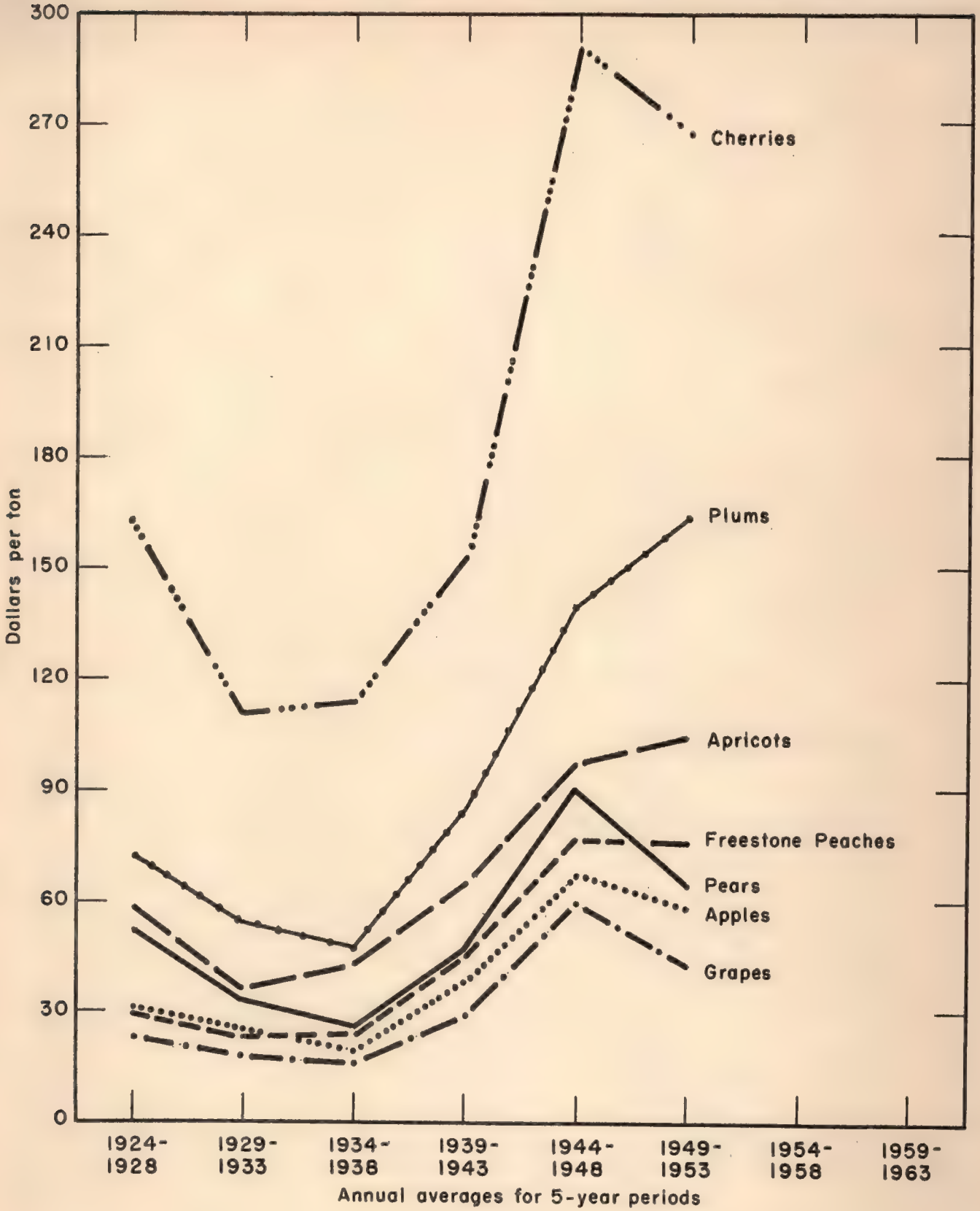
Yield Per Bearing Acre of Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; tons per bearing acre					
Apples	U.S.	1.43	1.49	1.60	1.87	--	--
	Cal.	3.84	4.51	4.93	5.31	6.37	7.57
Apricots	U.S.	2.27	2.94	2.87	2.68	--	--
	Cal.	2.25	2.99	2.86	2.57	3.56	4.13
Cherries	U.S.	1.14	1.40	1.32	1.57	--	--
	Cal.	1.46	1.51	1.46	1.77	2.47	3.38
Grapes	U.S.	3.16	2.83	3.58	4.15	--	--
	Cal.	3.82	3.36	4.40	4.92	5.60	5.76
Freestone peaches	U.S.	1.54	1.50	1.67	1.93	--	--
	Cal.	3.52	3.98	4.64	6.42	7.22	8.07
Pears	U.S.	2.22	2.49	3.25	3.77	--	--
	Cal.	3.49	3.49	4.21	5.48	6.86	8.91
Plums	U.S.	1.95	2.01	2.22	3.08	--	--
	Cal.	2.07	2.07	2.37	3.27	3.47	3.45

Grower Prices.--The average prices received by growers tell only part of a larger story. Yet, it may be of some interest to summarize the broad developments in the grower prices of deciduous fruits. That grower prices generally trend along with general business conditions is valid in only a very broad sense as suggested by the following over-all averages and as pictured for California deciduous fruits in Figure 4.

Grower price declines from the middle 1920's to the depression years of the 1930's occurred in all of the deciduous fruits, nationally and in California. By the latter half of the 1930's, price rises commenced and continued on to the

FIG. 4 GROWER PRICES OF VARIOUS DECIDUOUS FRUITS IN CALIFORNIA



war and immediate postwar years. Significant differences in the price behavior of the various fruits emerged in more recent years. While the average grower prices of apricots and plums trended upward between 1944-1948 and 1949-1953, those of the other deciduous fruits trended downward in various degrees apparent from Figure 4 .

Grower Prices of Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; dollars per ton					
Apples	U.S.	49.50	37.17	34.17	51.33	93.33	83.00
	Cal.	30.67	24.67	19.50	38.33	66.92	58.25
Apricots	U.S.	--	37.02	42.90	66.58	98.60	104.56
	Cal.	58.16	36.76	42.76	64.80	97.32	104.18
Cherries	U.S.	146.78	90.01	75.23	115.58	242.60	181.00
	Cal.	162.00	111.40	114.20	153.06	290.60	267.00
Grapes	U.S.	28.90	20.16	18.20	31.00	61.56	46.38
	Cal.	24.98	17.62	16.26	29.14	59.16	42.82
Freestone peaches	U.S.	51.83	37.42	38.08	55.92	84.75	78.42
	Cal.	30.33	23.50	24.33	45.00	76.83	75.75
Pears	U.S.	57.08.	37.42	30.50	53.50	96.08	79.42
	Cal.	52.92	32.92	26.33	47.00	90.17	64.83
Plums	U.S.	68.38	52.40	46.12	83.72	138.20	163.40
	Cal.	71.94	54.42	47.12	84.92	139.80	163.20

These generalizations are in terms of trend tendencies for the state and nation at large. Although the price behavior noted here characterizes the experience of most growers of the respective fruits, there undoubtedly have been many exceptions depending upon particular circumstances, local production areas, and various utilizations of the fruits. But in the main, only the grower prices of apricots and plums have averaged higher in recent years, while the other deciduous fruits have experienced declines from the highs of the war and immediate postwar years.

Since the grower prices referred to above are averages for all utilizations, it is of interest to contrast the grower prices received from the fresh and processed markets. Such prices are shown, for the 1934-1938 and 1949-1953 periods, in the following tabulation.

Prewar (1934-1938) to Postwar (1949-1953) Changes in California Grower Prices for Various Fresh and Processed Deciduous Fruits

Fresh fruit	1934-1938		1949-1953		Per cent change from 1934-1938 to 1949-1953	
	Fresh	Processed	Fresh	Processed	Fresh	Processed
	annual averages for five-year periods; dollars per ton				per cent	
Apples	27.83	8.44	84.92	35.83	+205	+325
Apricots	49.40	42.27	152.16	98.33	+208	+133
Cherries	114.30	114.70	315.20	223.40	+275	+ 94
Grapes	21.94	14.58	55.48	39.67	+153	+172
Freestone peaches	32.75	20.61	102.13	53.43	+212	+159
Pears	28.58	23.93	71.92	61.46	+152	+157
Plums	47.82	27.00	170.80	47.80	+257	+ 77

With the general level of prices, the grower prices for the fresh and processed outlets have increased since the immediate prewar years. But the degrees of increase have varied among the various fruits; for some, the fresh-use price increased relatively more than the processed-use price, while for others the reverse has been true. When the seven fruits are grouped, we find that in over-all terms, between 1934-1938 and 1949-1953, the weighted average fresh-use price received by California growers increased about 190 per cent compared with an increase of about 157 per cent in the processed-use weighted average price. Excluding grapes, because of their wine and raisin outlets, the weighted average prices increased from 1934-1938 to 1949-1953 by about 213 per cent for the fresh use and about 139 per cent for the processed-use outlet. The data, thus, indicate that, in comparison with the situation during prewar years of 1934-1938, the prices received by California growers from the fresh market have in recent years, on the average, increased more than the prices received from the processed products market. This relative lowering in the price of deciduous processed fruits probably enters into the explanation of the increase in the per-capita disappearance of processed deciduous fruits noted in the following pages.

Another index of the relative gross returns from deciduous fruits is a measure which reflects the combined influence of prices and yield. Such measures, gross returns per bearing acre, are summarized as follows for California deciduous fruits.

Grower Gross Returns Per Bearing Acre.--The trends resulting from the combined influences of yields and growers' prices, each sketched previously, may now be reviewed. By multiplying yield per bearing acre and grower prices, one obtains growers' gross returns per acre. Such computations were made for each of the deciduous fruits considered here with the following five-year averages resulting.

California Grower Gross Returns Per Bearing Acre for Various Deciduous Fruits

Fruit	1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
	annual averages for five-year periods; dollars per bearing acre					
Apples	117.77	111.26	96.14	203.53	426.28	440.95
Apricots	130.86	109.91	122.29	166.54	346.46	430.26
Cherries	236.52	168.21	166.73	270.92	717.78	902.46
Grapes	95.42	59.20	71.54	143.37	331.30	246.64
Freestone peaches	106.76	93.53	112.89	288.90	554.71	611.30
Pears	184.69	114.89	110.85	257.56	618.57	577.64
Plums	141.55	108.47	109.30	273.76	479.55	563.73

In line with the cyclical movement of prices in general, California grower gross returns per bearing acre of deciduous fruits declined during the depression of the 1930's. By the latter half of the 1930's, gross returns per acre began an upward march which reflected the upward trends in both prices and yields. The upward march has continued on for most of the deciduous fruits but not for others.

The two fruits for which California growers received lower average gross returns per bearing acre in 1949-1953, compared with 1944-1948, are grapes and pears, Although the average yield of grapes increased very slightly during the two periods, the average grower prices decreased sufficiently so that the gross returns per bearing acre of grapes fell sharply from about $331 per acre as the average

for 1944-1948 to about $247 per acre for 1949-1953. The average gross returns per acre of California pears declined from about $619 in 1944-1948 to about $578 in 1949-1953. In the case of pears, the average yield increased considerably between the two periods, but the grower prices declined sufficiently so that gross returns per bearing acre of California pears decreased.

The other five deciduous fruits considered here experienced increases, by varying degrees, in the average grower gross returns per bearing acre between the 1944-1948 and 1949-1953 periods. The largest increase was that for California cherries which had a higher average yield but a lower grower price per ton. The yield increase, however, was substantially more than sufficient to offset the price decrease.

California apricots is the only one of the deciduous fruits which experienced an increase in both yield and grower price between 1944-1948 and 1949-1953. A considerable increase in the average yield in conjunction with a small increase in the average grower price resulted in the increase of grower gross returns per bearing acre of California apricots.

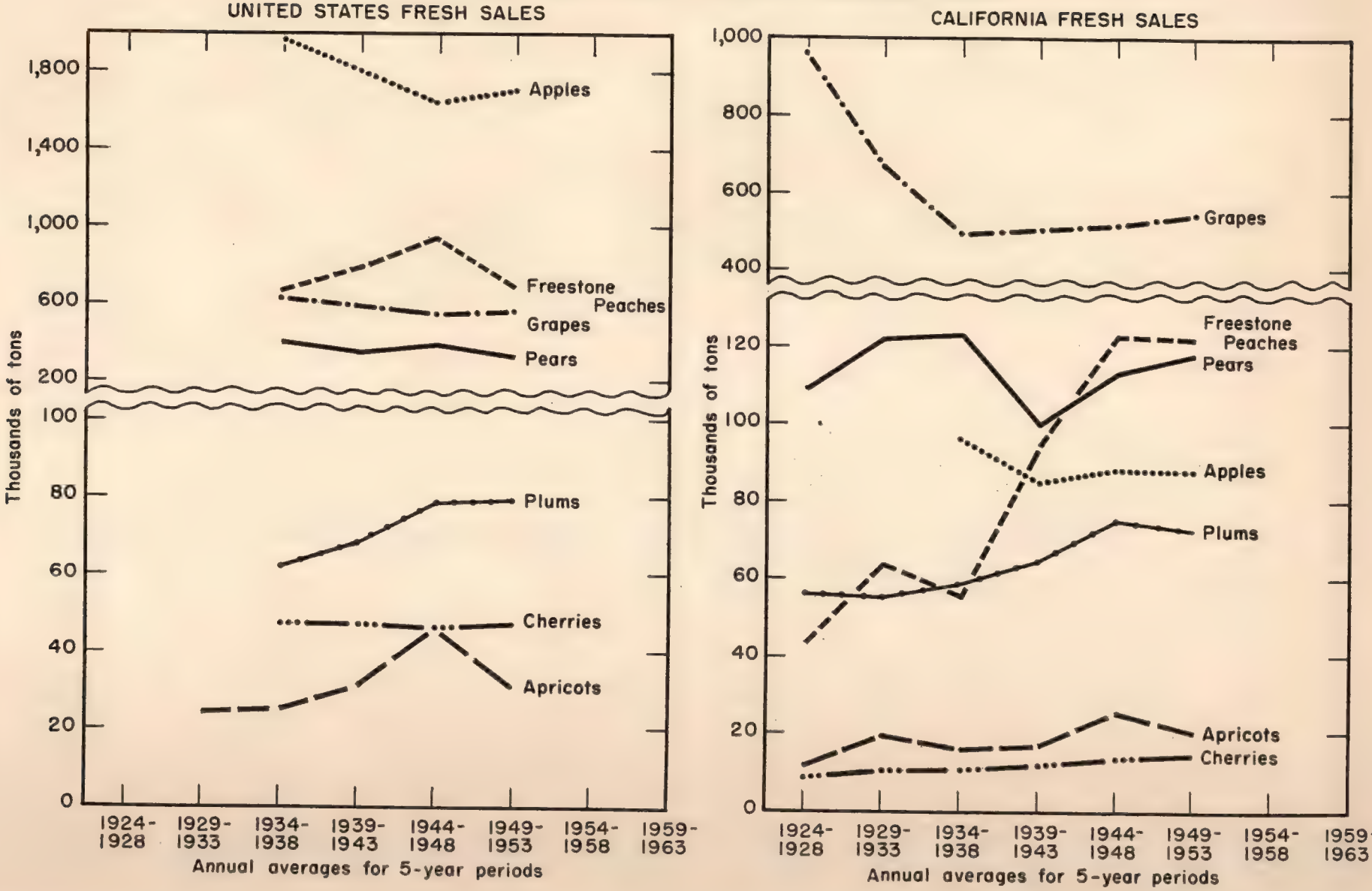
Although growers' prices for California freestone peaches and apples averaged less in 1949-1953 than in 1944-1948, their yield had improved so that the resulting gross returns per bearing acre increased for those two fruits between the two periods. The increase in gross returns per acre of California plums came about for still a different season; there, yield decreased slightly, but it was more than offset by the increase of the average grower price between 1944-1948 and 1949-1953.

It should be noted, although it should not require emphasis, that the grower gross returns per bearing acre referred to above are not net returns or profits received by growers. The figures are gross and, before inferences about grower net returns can be made, it is necessary to consider fixed and operating expenses incurred by growers. Thus, the period comparisons sketched here are more useful as indicators of the combined influences of yield and grower prices rather than being suggestive of grower net earnings.

Fresh Sales.--With interest oriented toward developments in the fresh fruit markets, we now turn to trends in the volume of farm sales destined for fresh use. The relevant five-year averages are summarized in the following tabulation.

These data are shown in Figure 5 for convenient comparisons. There may be noted the national sales of apples for fresh use exceed by a substantial amount the national level of fresh use in the other deciduous fruits. But of the California fruits, grapes lead in fresh use.

FIG. 5 FRESH SALES OF VARIOUS DECIDUOUS FRUITS



Fresh Sales of Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; thousands of tons					
Apples	U.S.	--	--	1,957.4	1,812.6	1,645.6	1,699.1
	Cal.	--	--	96.3	84.9	88.2	87.8
Apricots	U.S.	--	24.2	25.1	30.8	45.9	30.9
	Cal.	11.5	19.3	16.2	16.8	25.2	20.2
Cherries	U.S.	--	--	46.6	46.7	46.5	47.1
	Cal.	8.7	10.5	10.7	12.0	13.6	14.7
Grapes	U.S.	--	--	623.1	575.5	545.9	563.3
	Cal.	958.0	668.0	492.7	505.2	515.8	540.0
Freestone peaches	U.S.	--	--	665.0	775.1	935.3	678.4
	Cal.	42.9	64.1	55.8	93.7	122.7	122.0
Pears	U.S.	--	--	395.9	352.3	387.0	333.2
	Cal.	108.6	121.9	123.3	99.9	113.3	118.1
Plums	U.S.	--	--	62.1	68.4	78.2	78.7
	Cal.	56.1	55.4	58.5	64.4	74.7	72.4

In terms of general trend, the national sale of fresh apples and fresh pears has been down during most of the past decade and a half. But between 1944-1948 and 1949-1953, fresh apple sales turned up slightly while fresh pear sales trended downward. The national sale of grapes for fresh use has changed little over the past 15 years, with a slight downward trend apparent. Freestone peaches increased substantially between 1934-1938 and 1944-1948 but lost most the gain in the next five-year period. Fresh plum sales have gone up but at a reduced rate in the more recent years, and fresh cherries have hardly changed in terms of trend. Apricots, as freestone peaches, first trended upward in their national fresh sales then declined sharply.

When California fresh sales are examined, certain differences are noticeable. Fresh cherries maintained a consistently rising trend during the three decades and, although the fresh apricot trend has also been upward, a decrease occurred in the most recent five-year period. California fresh plum sales increased substantially until 1944-1948 after which a small decline appeared. Fresh apples

in California declined sharply from 1934-1938 to 1939-1943, but then increased and, during the past decade, have just about held their own in average terms.

The phenomenal increase in the fresh sales of California freestone peaches is apparent from Figure 5, but the upward trend peaked in 1944-1948 and in the next five-year period no gain was registered. California fresh sales of pears went up then down to a low in 1939-1943, after which an upward trend occurred, although fresh sales of pears remain under those of freestone peaches which is the reverse of the situation in the earlier years.

After the sharp decline in California fresh grape sales during the 1924-1928 to 1929-1933 period, a rising trend has declined. These so-called fresh sales, prior to 1934, must be viewed with care since, although they were sold and shipped as fresh sales, their utilization during the prohibition years was unlikely to be the same as after those years.

When the recent developments in California fresh sales are reviewed for, say, between 1944-1948 and 1949-1953, we find that grapes, pears, and cherries have increased, apples and freestone peaches remained about the same, while apricots and plums fell off. Since the fresh sales are not wholly independent of total sales, we next consider their interrelation in percentage terms.

Fresh as Per Cent of Total Sales.--One measure of the changing position in the deciduous fresh fruit markets is the relative magnitudes of fresh sales compared with the total sales. When such measures are computed, the results are as tabulated on the following page.

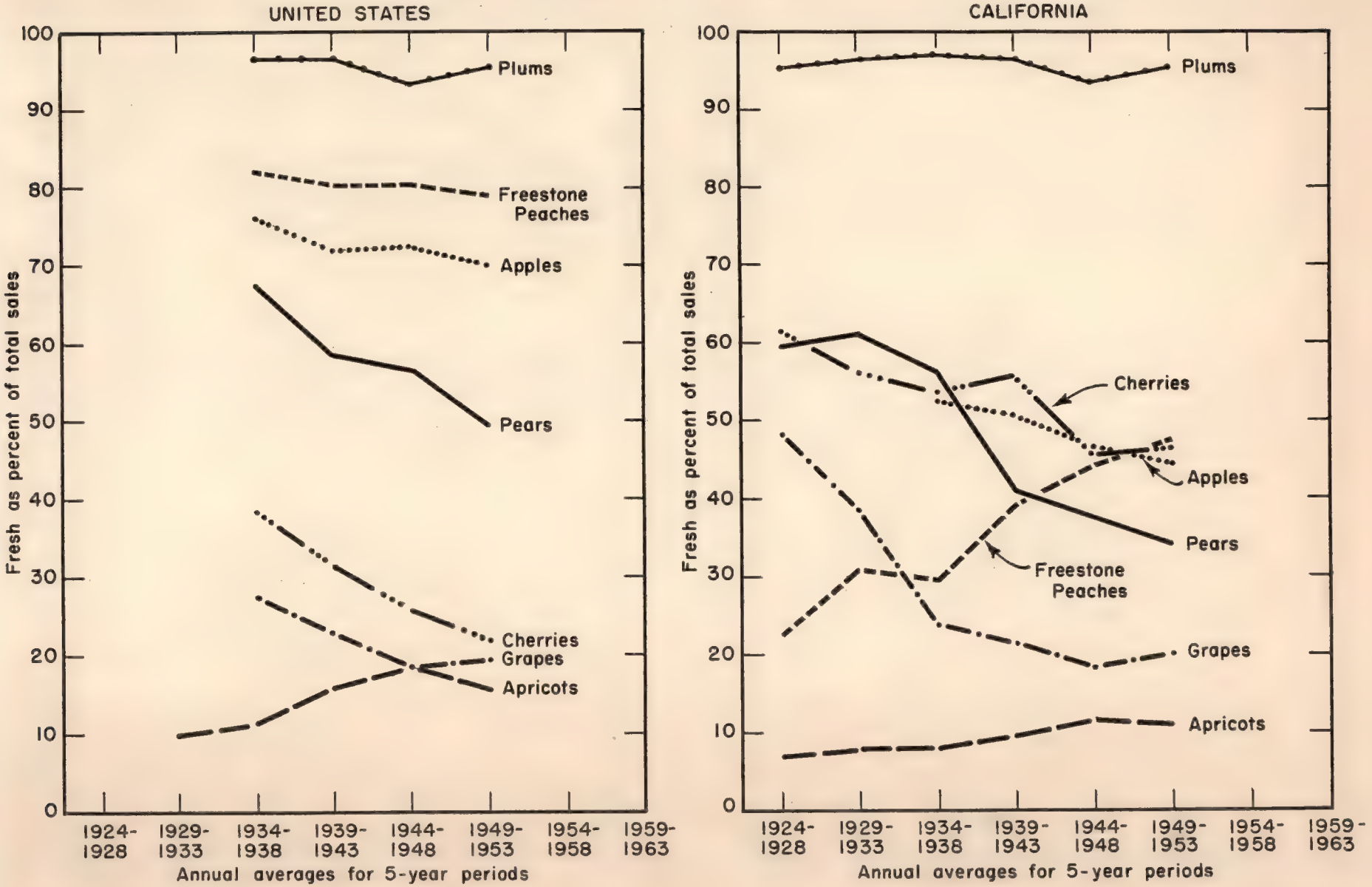
These data are shown in Figure 6, with one panel for the national percentages and the second panel for California percentages. Comparison of the two panels permits noting how the national and California trends are similar in some aspects and different in others.

The fresh market proportion of the plum crop has been just about level at a long-term average near 95 per cent. This is the largest fresh-use proportion of any of the deciduous fruits.

When freestone peaches are reviewed, we find that nationally the percentage going into fresh sales has been slowly declining. But for California freestone peaches, the opposite has occurred; the long-term trend has been upward, with the rate of increase tapering off in recent years.

Fresh market sales of apples, as a per cent of total apple sales, have trended downward for the nation as a whole and also for California, with the rate of decline being stronger in California than nationally. The national figure declined from near 75 to 70 per cent between 1934-1938 and 1949-1953, while the California figure declined from 55 to 45 per cent during the same period.

FIG. 6 FRESH SALES AS A PERCENT OF TOTAL SALES OF VARIOUS DECIDUOUS FRUITS



Fresh as Per Cent of Total Sales of Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; percentages					
Apples	U.S.	--	--	76.0	72.0	72.3	70.0
	Cal.	--	--	52.5	50.7	46.4	45.8
Apricots	U.S.	--	10.1	11.7	18.5	18.7	16.1
	Cal.	7.1	8.2	8.0	11.5	11.5	11.1
Cherries	U.S.	--	--	35.2	32.5	26.8	21.8
	Cal.	61.4	56.2	53.5	58.0	45.6	46.7
Grapes	U.S.	--	--	27.7	22.8	18.7	19.6
	Cal.	48.5	38.7	23.8	21.5	18.6	20.0
Freestone peaches	U.S.	--	--	82.0	80.5	80.7	78.8
	Cal.	22.6	30.9	29.7	39.0	43.8	47.3
Pears	U.S.	--	--	67.5	58.6	56.5	49.4
	Cal.	59.6	61.0	55.8	41.2	37.5	33.9
Plums	U.S.	--	--	96.7	96.3	93.5	95.7
	Cal.	95.5	96.6	96.9	96.5	93.7	95.4

The proportion of fresh to total sales of pears also declined, both nationally and in California. The decline in this state's percentage began after the 1929-1933 peak and has continued at varying rates during the succeeding five-year periods with the percentage declines between 1939-1943 to 1944-1948 and 1944-1948 to 1949-1953 being about equivalent.

The proportion of cherries marketed fresh has trended downward during the past decade and a half when the national situation is considered. For California the long-term downward trend was interrupted by the rise in 1944-1948 only to resume in the next five-year period. But between 1944-1948 and 1949-1953, the California fresh percentage for cherries recovered and rose slightly. It should be noted that the California experience is heavily weighted by fresh cherries which is also reflected by the considerably higher proportion of California cherries going to fresh market than is characteristic of the national crop of cherries.

California fresh sales of grapes, as per cent of total grape sales, followed a declining trend until the 1944-1948 period. During the most recent five-year

period considered, there was recorded an increase in the fresh grapes percentage. But the fresh grape percentage has not recovered to the level prevailing immediately before the war. The national proportion of fresh sales has trended up.

Apricots, both nationally and in California, generally have a smaller proportion of their crop sold for fresh use than any of the other deciduous fruits. The fresh proportion for apricots trended up until 1939-1943, changed somewhat during the next period, and then receded very slightly in California, but more so for the national crop sales.

When recent experience is reviewed, we find that nationally only in plums and grapes had there been an increase in the volume of fresh sales as a percentage of total sales; the national percentages declined for freestone peaches, apples, pears, cherries, and apricots. The recent California experience by comparison has been as follows: the fresh percentages for freestone peaches increased as well as those for plums and grapes; the fresh percentages for apples and pears declined; and apricots declined but only very slightly, while cherries rose slightly.

We now turn to review of developments in the per-capita disappearance of deciduous fruits. All uses combined and fresh use will be considered separately.

Per-Capita Disappearance, Total and Fresh.--Trend estimates of per-capita disappearance, as indicators of consumption, reflect the interactions of production, supplies marketed, demand, price, income, population, and consumer preferences and tastes. Such influences and their interactions do not remain constant over time, with resulting effects on the per-capita figures. Thus, in a general way, per-capita disappearance figures are symptoms of basic underlying developments of the type discussed in other sections of this report.

The computed average per-capita disappearance rates for deciduous fruits are as tabulated in the following page.

The changing relative positions in the per-capita disappearance of deciduous fruits are shown in Figure 7, with one panel for per-capita total disappearance and the other panel for per-capita fresh disappearance. These per-capita averages, based on the indicated periods, trace the trend developments during the past three decades during which time various changes have emerged.

In review of the per-capita total disappearance trends, we find that by the latter half of the 1930's, grapes (in all uses combined) about equaled and then exceeded apples. This came about through a declining trend in apples and a rising trend in grapes, although the per-capita trends in total disappearance of apples and grapes have reversed in recent years. Between 1944-1948 and 1949-1953, the per-capita rate for grapes declined while that for apples increased slightly.

period considered, there was recorded an increase in the Greek Orthodox
but the three Greek Patriarchs has not responded to the local prevailing tempo-
thereby before the war. The national proportion of them either has remained no
longer, both nationally and in Gaithersburg, previously have a smaller pro-
portion of their city pols like Queen Ann of the other Gaithersburg Precinct.
The Greek conversion for episcopate bracketed to until 1930 1950, changed somewhat
during the next period, and then receded very slightly in Gaithersburg, but more
so for the non-local city areas.

When recent experience is reviewed, we find that relatively only a place and
persons had there been an increase in the volume of Greek sales as a proportion of
total orders; the original percentage declined for Gaithersburg per-chase, applica-
ns, churches, and service. The recent California arrivals in Gaithersburg
lar item as follows: the Greek percentage for Gaithersburg remained in
most an these for plans and dropped the Greek percentage for males and newly
married; and percentage declined but only very slightly, while according pro-
portion.

We now turn to review of details in the sub-county disappearance of de-
ceased Greeks. All wives combined and Greek men will be considered separately.

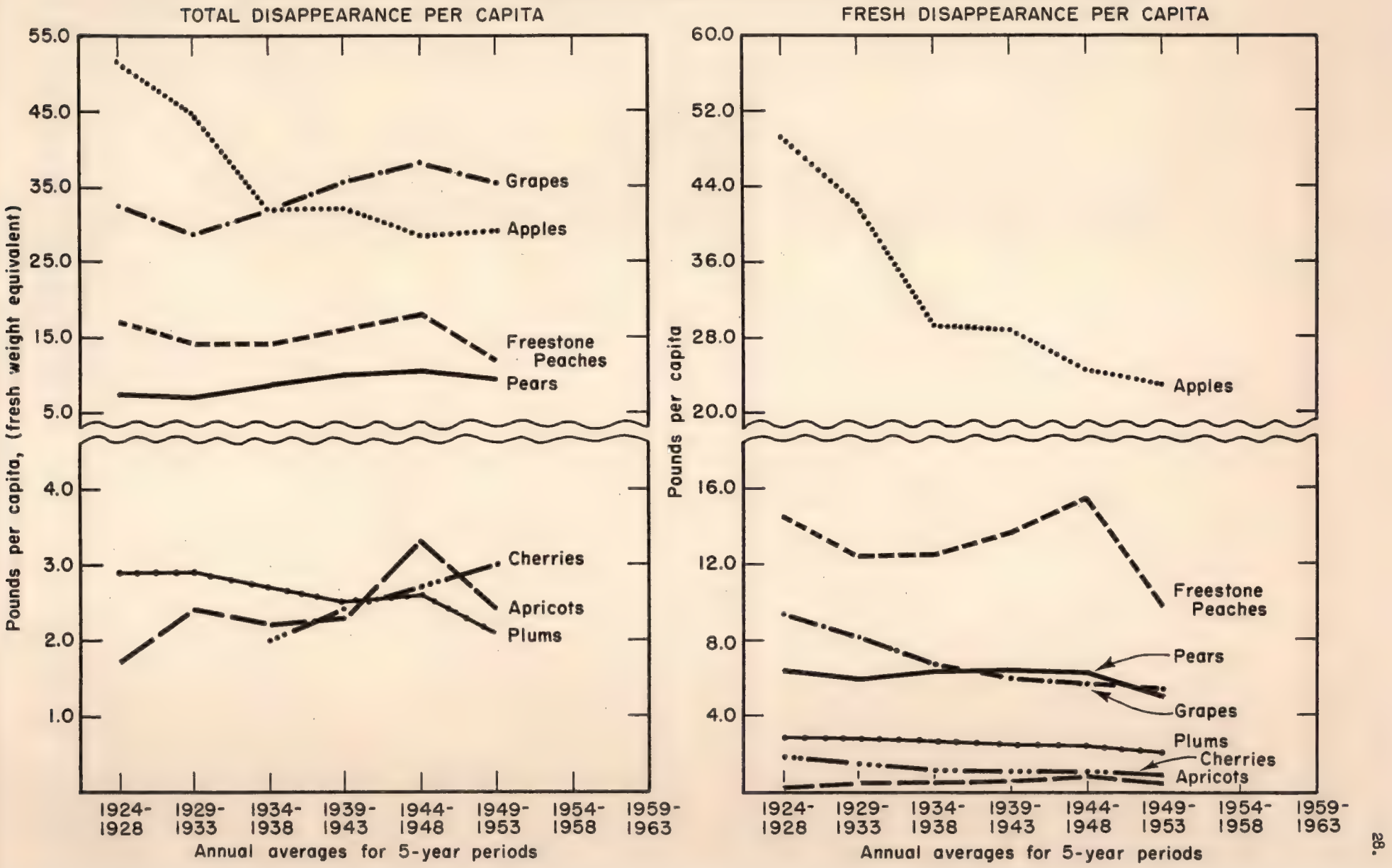
Gaithersburg Disappearance, Col 1 and Greek.--Trend estimates of mis-sepia
disappearance, as indicators of non-mention, reflect the interactions of produc-
tivity, sex ratio movement, death, birth, income, population, and economic pressu-
res and tension. Such tendencies and their interactions do not remain certain
over time, with resulting shifts on the per-capita figures. Thus, in a general
way, per-capita disappearance figures are symptoms of basic underlying tendencies
some of the type discussed in other sections of this a report.

In accordance previous pre-census differentiations under the declarations Greeks
are, included in the following part.

The changing relative positions in the non-orphic disappearance of deceased
Greeks are shown in Figure 7, with one point for per-capita total disappearance
and the old 3 period for non-capita local disappearance. These per-capita magni-
tudes based on the modified periods, have the trend downwards during the
past three decades during which time various changes have occurred.

In review of the per-capita total disappearance records, we find that by de-
grees half of the Greeks, Syrians (if all were counted) about equated and then
exceeded Greeks. This came about through a declining trend in grains and a rela-
tively in Syrians, although the per-capita trends in total disappearance of orphans
may possibly have reversed in recent years. Between 1931-1935 and 1936-1940, the
Greek per-capita rate for Syrians decreased while that for Syrians increased slightly,

FIG. 7 PER CAPITA DISAPPEARANCE, TOTAL AND FRESH, OF VARIOUS DECIDUOUS FRUITS



United States Per-Capita Disappearance Estimates for Various Deciduous Fruits

Fruit		1924-1928	1929-1933	1934-1938	1939-1943	1944-1948	1949-1953
		annual averages for five-year periods; pounds per capita per year, fresh weight equivalents					
Apples	Total	51.7	44.4	31.8	31.8	28.4	29.2
	Fresh	49.1	41.9	29.1	28.6	24.3	22.8
Apricots	Total	1.7	2.4	2.2	2.3	3.3	2.4
	Fresh	0.2	0.4	0.4	0.5	0.7	0.4
Cherries	Total	--	--	2.0	2.4	2.7	3.0
	Fresh	1.8	1.4	1.1	1.0	1.0	0.8
Grapes	Total	32.5	28.5	32.2	35.5	37.8	35.7
	Fresh	9.3	8.1	6.7	6.0	5.7	5.4
Freestone peaches	Total	16.9	14.2	14.1	15.9	18.1	12.1
	Fresh	14.5	12.4	12.4	13.6	15.4	9.8
Pears	Total	7.7	7.2	8.4	10.0	10.6	9.4
	Fresh	6.4	5.9	6.3	6.3	6.2	5.0
Plums	Total	2.9	2.9	2.7	2.5	2.6	2.1
	Fresh	2.8	2.8	2.6	2.4	2.4	2.0

The per-capita disappearance of freestone peaches in all uses first declined and then trended upward through the middle and latter 1940's. But a considerable decline developed within recent years. Thus, from the long-term view, the per-capita disappearance rate for freestone peaches changed little, perhaps declining very slightly. Pears, in terms of per-capita total disappearance, trended up slowly until 1944-1948, then receded slightly.

The over-all per-capita rate for apricots, with its ups and downs, trended upward also until the 1944-1948 period, then dropped substantially between 1944-1948 and 1949-1953. Plums, as measured by their per-capita total disappearance, trended down with a considerable decline developing also between 1944-1948 and 1949-1953. Thus, although plums and apricots have opposite long-term trends, for both fruits these have been significant per-capita recessions during the last five-year period.

In contrast, the per-capita total disappearance rate for cherries has followed a consistent upward trend which continued through their 1949-1953 average. Only for cherries is there evident a significant per-capita increase between 1944-1948 and 1949-1953. The only other deciduous fruit registering an increase

in the per-capita total disappearance during that period was apples, with its increase being only a very slight one.

It appears that 1944-1948 was a significant period in that it marked a turning point in the trend behavior of per-capita total disappearance of the various deciduous fruits, excepting cherries. After 1944-1948, and reflecting the average experience during recent years, the per-capita total disappearance turned down significantly for plums, apricots, freestone peaches, grapes, and also down for pears but not so strongly; the rate of cherries increased, as noted earlier, while that for apples increased only slightly. Thus, it is clear, when the deciduous fruits are considered as a group, an index of their total per-capita disappearance declined between the 1944-1948 and 1949-1953 periods.

In view of the findings presented above for per-capita total disappearance, there remains the question as to what have been the trend developments in the per-capita disappearance of fresh deciduous fruits. The summary average data were shown in the preceding tabulation and also are pictured in Figure 7. We now survey the trends shown there.

It does not require close study of Figure 7 to see the marked downward trend in the per-capita fresh disappearance of apples. Although the rate of decline has not been as strong during 1944-1948 to 1949-1953 as in some earlier periods, the downward trend persisted. This contrasts with the disappearance per-capita rate of apples in all uses which rose slightly between 1944-1953 decade. The changing situation in per-capita disappearance of fresh apples may be emphasized by noting that the average rate for 1949-1953 was less than half of what it was 25 years earlier.

After a downward trend from 1924-1928 to 1929-1933, the fresh freestone per-capita disappearance rate began an accelerated rise which peaked with the average for 1944-1948. During the next five years, however, the fresh freestone rate fell sharply to a level lower than at any period considered here. As a result, the average per-capita disappearance rate for 1949-1953 was about 64 per cent of the average rate in 1944-1948, 5 years earlier, and 68 per cent of the average rate in 1924-1928, 25 years earlier. The general conformation of the per-capita disappearance trend for fresh freestone peaches was much like that for the trend of per-capita disappearance of all freestone peaches.

Fresh pears maintained a fairly stable per-capita disappearance from 1924-1928 to 1944-1948 which was reflected by a horizontal long-term trend. Yet, from 1944-1948 to 1949-1953, the trend turned downward. As a result, the fresh per-capita average rate for 1949-1953 was about 85 per cent of the average for previous quarter of a century.

Grapes shipped for fresh use display a persistent downward per-capita disappearance rate. The trend decline during the past decade, however, has slowed so that the decrease in recent years was smaller than in previous periods. Yet, the record still shows a trend pointing downward.

Fresh plums and fresh cherries have roughly parallel per-capita disappearance trends, each characterized by a slight downward slope. The change from one period to the next has been small. But when we compare the averages for recent years with those of the middle 1920's, we find that fresh plums decreased about 30 per cent and fresh cherries decreased about 55 per cent which are meaningful changes.

The long-term trend in the per-capita disappearance of fresh apricots has been upwards, with a historical peak in 1944-1948, followed by a decline in 1949-1953. As a result, the average per-capita disappearance of fresh apricots in recent years has been about equivalent to the average rate during the 1929-1938 decade.

It need not be concluded that the declines in the average per-capita disappearance of fresh deciduous fruits experienced during the past five or so recent years are forerunners of further declines. Such may occur, but it certainly is not inevitable. Historical trends of per-capita disappearance, as trends for other economic time series, record what has occurred, not what will occur. Trends often have a characteristic of reversing their direction and such can well occur in the per-capita disappearance of fresh deciduous fruits. That such a possibility merits the interest of the fresh deciduous fruit industries need not here be stressed.

VARIOUS DECIDUOUS FRUITS

The preceding review of selected major deciduous fruits was presented in comparative terms. Particular economic aspects as production, acreage, yield, total and fresh sales, and per-capita disappearance trends were considered in turn, with attention directed to comparisons among the various fruits. Certain similarities and differences were noted.

This section of the report reconsiders the materials discussed earlier. But now we turn to a review of each of the respective fruits. The related trends for each fruit separately will be examined. The materials on production, acreage, yield, and utilization are set forth as background for consideration of the per-capita disappearance in fresh outlets. Although this section duplicates in part the preceding materials, there is the advantage of having an integrated account of significant and related developments as they pertain to a particular fruit. Those readers who are in the main concerned with one of the specific deciduous fruits, thus, may find in this section an over-all account of that specific fruit.

Apples

Production.--Apple production fluctuates from year to year, with sharp changes often occurring from one year to the next. This is characteristic of the crop in the country at large as well as in California. For the country at large, there has been a declining trend in production during most of the past 30 years, but it appears the bottom of the decline may have occurred around 1945. Since then, there has been a rising trend, although the level is still under that of the 1930's.

California apple production, in contrast with the national trend, has generally varied around a level trend. The average production in recent years has not been much different from that of 25-30 years earlier. Through years of national prosperity, depression, active and "cold" wars, apple production in California has continued to maintain a fairly stable average level over the years.

The crossing method of selected major deciduous fruit s was presented in comparative terms. Particular economic aspects as production, marketing, advertising, and fresh sales, and net-profit dispositions trends were considered in them, with attention directed to comparisons among the various fruits. Certain additional differences were noted.

This execution of the report necessitates the mathematics discussed earlier, but not to the extent of each of the respective fruits. The related fresh and each fruit separately will be considered. The accounts on production, varieties, yields, and utilizations are each taken as background for consideration of the pre-capital changes in fresh and dry. Although this section duplicates in part the preceding materials, since is the necessity of including an itemized account of expenditures and related de elopments as they pertain to a particular fruit. Then readers who are in the main concerned with one of the specific deciduous fruits, then, may turn in this section an over-all account of that specific fruit.

Production.--Figure 2 illustrates fluctuations from year to year, with sharp changes often occurring from one year to the next. This is characteristic of the crop in the country at large as well as in California. For the country as a whole, there has been a decline trend in production during most of the past 15 years, but it appears the bottom of the decline may have occurred around 1940. Since then, there has been a rising trend, although the level in all ways that of the 1920's.

California's apple production, in contrast with the national trend, has generally varied around a low I trend. The average production in recent years has not been much different from that of 25-30 years earlier. Through years of cultural progress, depression, active and "cold" wars, acute production in California has continued to maintain a fairly stable average level over the years.

Apples: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	3,278.7	197.1
1929-1933	3,108.2	201.7
1934-1938	2,895.2	188.4
1939-1943	2,817.2	176.7
1944-1948	2,443.6	198.4
1949-1953	2,661.7	194.1

Bearing Acreage.--Since the determinants of apple production are bearing acreage and yield, they are next considered. The pertinent trend data on bearing acreage of apples are as follows:

Apples: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 acres	
1924-1928	2,300.3	51.6
1929-1933	2,093.9	44.9
1934-1938	1,821.2	38.4
1939-1943	1,500.3	33.4
1944-1948	--a/	31.0
1949-1953	--	25.6

a/ Dashes indicate data not available.

A declining trend in apple-bearing acreage is characteristic of both California and the country at large. For the nation, reliable bearing acreage data are not available for recent years, yet the inference may be made that bearing

acreage in apples continued to recede somewhat. The situation in California is more clear, however, since more adequate data are available. In California, recent acreage producing apples is about one half of the bearing acreage of a quarter century earlier.

Figure 8 also shows the trend in California nonbearing acreage of apples. There occurred a sharp decline during the latter half of the 1920's, with a moderate decline continuing until the middle of the 1940's. Thereafter, for several years, nonbearing acreage trended up but, by 1950, turned down again. Now, nonbearing apple acreage in California is approaching the level of ten years earlier and is insufficient, by itself, to suggest an upward surge in production during the next few years.

Yield.--Volume of production of apples per bearing acre and yield has followed a different course in California compared with the country as a whole. The differences are suggested by the following summary averages:

Apples: Yield Per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	1.43	3.84
1929-1933	1.49	4.51
1934-1938	1.60	4.93
1939-1943	1.87	5.31
1944-1948	--a/	6.37
1949-1953	--	7.57

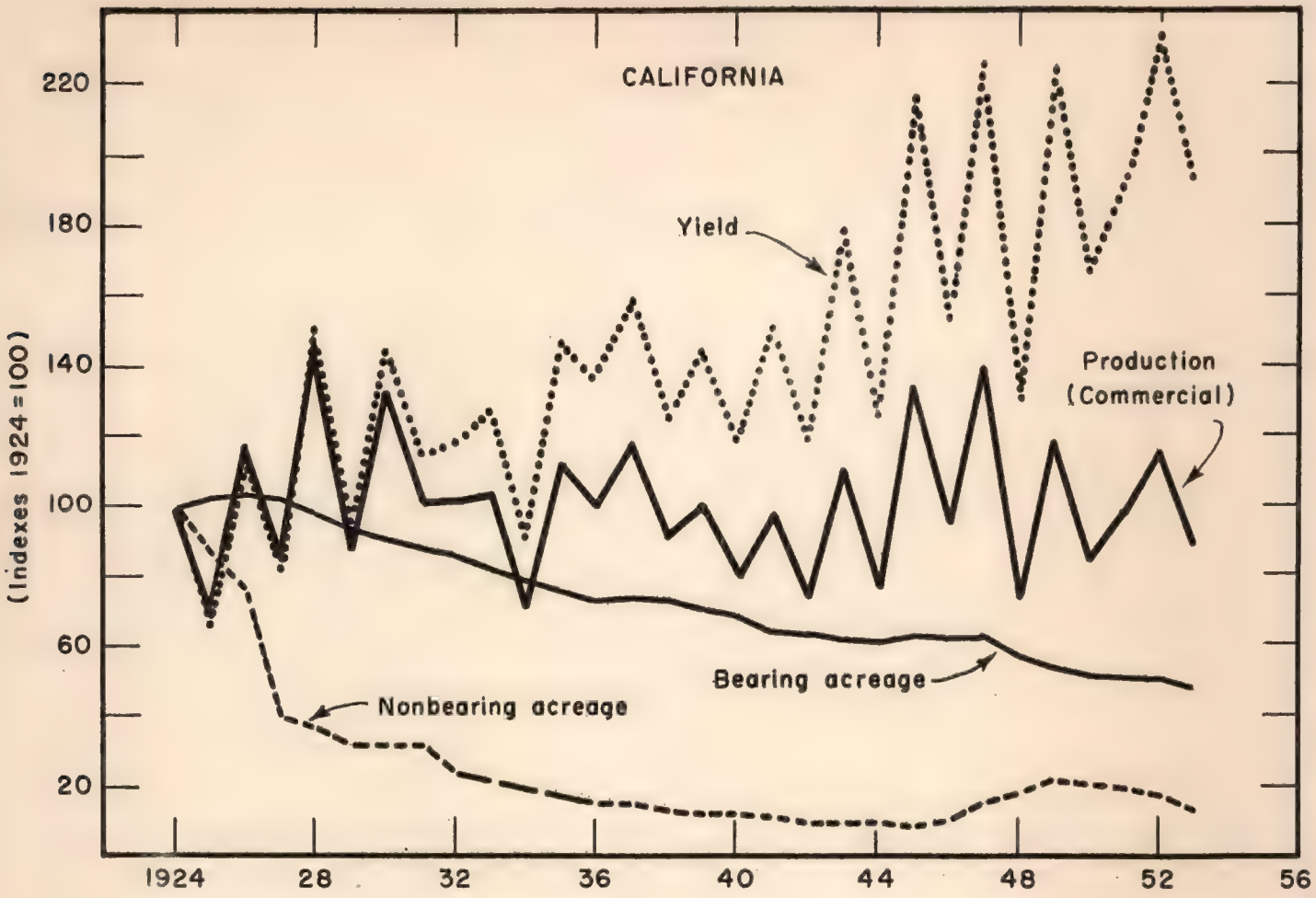
a/ Dashes indicate data not available.

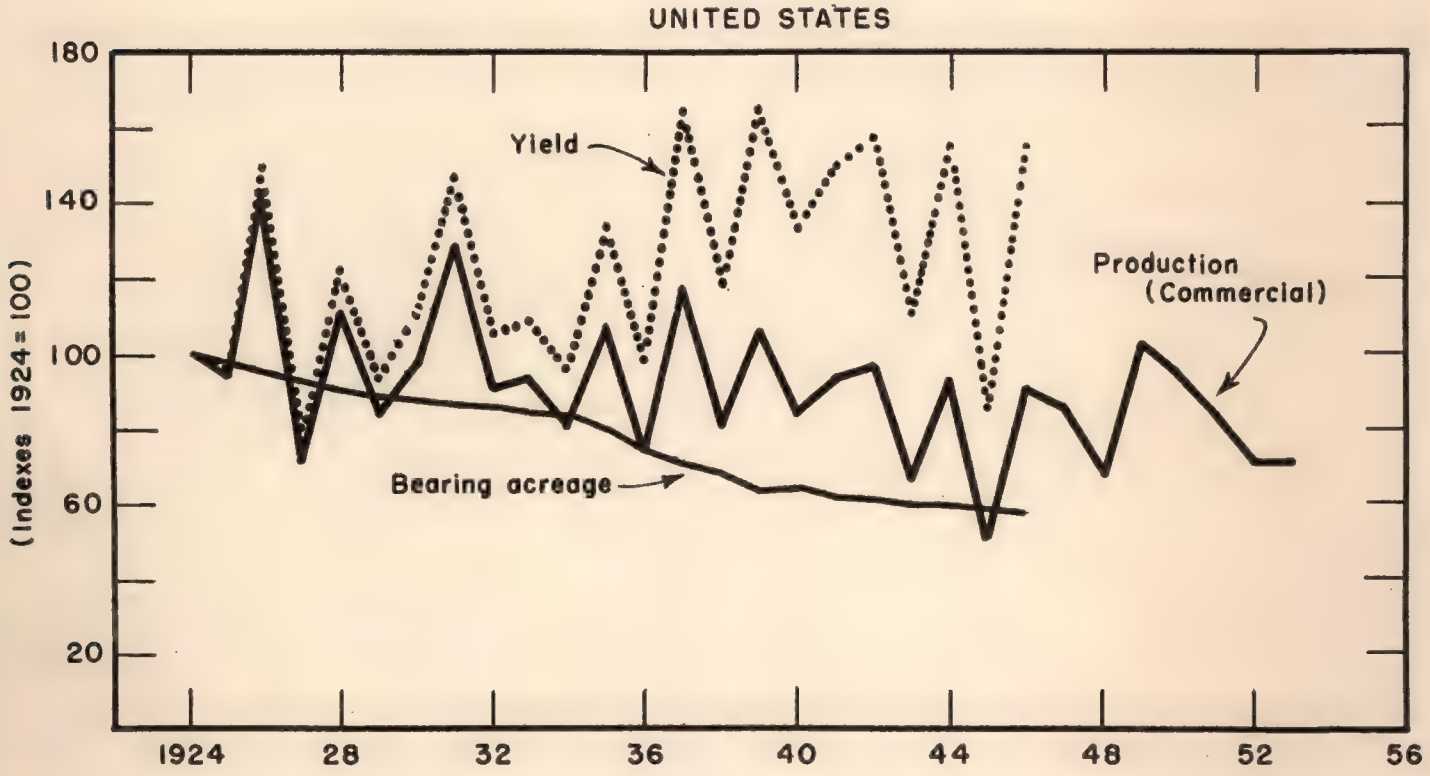
Aside from the higher average yield in California compared with the nation, another distinguishing feature merits comment. Yield per bearing acre of apples in California has followed a persistent and strong upward trend during the past three decades. The state yield has varied from year to year, characteristic of deciduous tree fruits, yet the upward trend is sharp and clear.

1919-1928	--	7.27
1929-1938	-- a/	6.72
1939-1948	1.97	5.32
1949-1958	1.60	4.52
1959-1968	1.42	3.83

a/ Denotes insufficient data for analysis.

FIG. 8 APPLES; PRODUCTION, ACREAGE AND YIELD





For the country as a whole, apple yield trended up from the middle 1920's to the early 1940's; thereafter, the trend ceased rising and, although national yield data are not available for the years after 1946, the inferences to be made from national production suggest that yield is unlikely to have risen, at least substantially.

It is reasonably clear that the downward trend in national apple production first resulted from the overpowering influence of declining acreage compared with a rising yield; later, declining yield operated in combination with the receding bearing acreage. But in California, stable average production of apples during the past three decades has resulted from a rising yield trend interacting with a declining bearing acreage trend. The interactions among the apple production, acreage, and yield trends are pictured in Figure 8, where index numbers are shown by years. The details submerged in the five-year averages referred to above can be noted, and the indexes permit examination of the respective trends in comparable terms.

Sales, Total and Fresh.--Apple production, dealt with above, is in part used on the farm but, in most part, sold for distribution through commercial channels. These channels include fresh-use outlets and processed products as canned apples, canned applesauce, and apple juices (including cider) which have received increasing attention in recent years. An over-all picture of the trends in fresh versus processed utilization of apples is summarized by the following five-year averages:

Apples: Total and Fresh Sales

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1934-1938	2,582.3	1,957.4	183.4	96.3
1939-1943	2,518.4	1,812.6	168.0	84.9
1944-1948	2,293.4	1,645.6	190.2	88.2
1949-1953	2,435.0	1,699.1	191.4	87.8

For the country at large, total farm sales of apples trended down until near the end of the 1940's and, during the past several years, recovered somewhat, although total sales now average under the volume of a decade ago. Since the middle 1930's, fresh sales have tended to account for a shrinking proportion of total sales for all uses. Whereas, national fresh sales accounted for 75 per cent of the total in 1934-1938, the figure was 70 per cent for 1949-1953. However, there has been only a very slight change in the national average percentage in the past decade.

When we look at the above figures for California, a somewhat different picture emerges. Total farm sales of California apples, in recent years, exceeded the earlier sales volume, although fresh sales behaved differently. In the middle 1930's, and thereabouts, fresh sales were slightly over one half of the total but now are near 45 per cent of the total. Thus, for California-produced apples, as well as for the national production, the fresh market has shrunk--by about the same relative amounts. California apples consistently have been utilized in products to a relatively larger extent than national production, from 25 to 30 per cent nationally and from 48 to 44 per cent for California. Further, during the past decade practically no trend change has developed, either nationally or in California, with respect to the proportion of total sales accounted for by fresh sales of apples. These are broad generalizations from which there have been departures in particular years but, as an over-all picture, the situation has been as indicated here.

Grower Prices.--In terms of broad swings, the average grower prices for California apples are correlated with the national average prices. Yet, important differences prevail as suggested by the following five-year average prices:

Apples: Grower Prices

Period	United States	California
	annual averages for five-year periods; dollars per ton	
1924-1928	49.58	30.67
1929-1933	37.08	24.67
1934-1938	34.17	19.50
1939-1943	51.25	38.33
1944-1948	93.33	66.92
1949-1953	82.92	58.25

That grower prices for California apples average under those for the country at large is a well-known fact illustrated by the foregoing data. This disparity fluctuates from year to year but a substantial difference prevails. Reasons for the difference are many, including the fact mentioned earlier that a larger proportion of California apples go into products (a lower value use outlet) as well as product characteristics from the view of consumers.

In the postwar years, grower prices for apples exceeded the prewar averages and, in the past couple of years, approached wartime high records. Inflationary price trends account in part for these developments in apple prices. But of importance also is the relatively small apple supply as against incomes of consummers and the growth in population.

Per-Capita Disappearance, Total and Fresh:--Elsewhere in this report are general review comments on population and income trends. Thus, they need not be surveyed in detail here. Yet, it is necessary to indicate the broad developments in per-capita consumption of apples resulting from the combined effects of consumer preferences, income, prices, and numbers of potential consumers. Some per-capita "consumption" (in fact, disappearance) figures are summarized as follows:

Apples: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use	Products
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	51.7	49.1	2.6
1929-1933	44.4	41.9	2.5
1934-1938	31.8	29.1	2.7
1939-1943	31.8	28.6	3.2
1944-1948	28.4	24.3	4.1
1949-1953	29.2	22.8	6.4

The production and utilization trends in apples take on more significance when viewed in terms of population and market growth as measured by the above

[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]

per-capita figures. Definite downward trends prevail in the per-capita use of apples, all uses combined, or fresh use separately. The per-capita use of apple products has increased during the past years, but such increase has not been sufficient to offset the significant per-capita decline in use of fresh apples. The per-capita total disappearance during the past ten years has tended to stabilize somewhat but at lower average levels than in earlier years, although the per-capita fresh disappearance still trends down. It is reasonably clear that the fresh market apple industry is currently faced with a situation where it is not keeping pace with the long-term economic and population growth of the country.

Fresh Apple Exports.--Since in some years exports of fresh apples account for an important part of the market, the position of the apple export market is considered. Some data bearing on this question are summarized in the following five-year averages.

Apples: United States Fresh Exports

Period	Fresh exports	Fresh exports as per cent of total fresh sales
	1,000 tons	per cent
1924-1928	347.4	--a/
1929-1933	358.4	--
1934-1938	240.4	12.3
1939-1943	31.5	1.6
1944-1948	57.6	3.4
1949-1953	57.2	3.3

a/ Dashes indicate data not available.

These data indicate the extent to which the tonnage of fresh apple exports have shrunk compared with the prewar years. In the postwar years, exports have fluctuated between 55,000 and 65,000 tons and have averaged 2 to 5 per cent of total fresh disappearance. These are sharp contrasts with prewar export business. It is summary data as these which account for the interest of the fresh apple industry in the expansion of foreign trade and the regaining of export markets.

	Trade	Per cent of total
1929-1933	34.4	—
1934-1938	44.4	29.1
1939-1943	41.8	1.6
1944-1948	74.6	3.4
1949-1953	97.8	3.3

a/ Dashes indicate data not available.

Apricots

Production.--Apricots are another deciduous fruit used fresh, for canning, and for drying. At the outset, it may be noted that, by far, the preponderance of apricot production is located in California. Thus, this state dominates the national situation in apricots. This is clearly indicated by the following five-year averages:

Apricots: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	168.6	167.4
1929-1933	248.6	242.8
1934-1938	229.6	216.0
1939-1943	201.0	179.4
1944-1948	265.9	234.4
1949-1953	202.9	187.6

The annual production of apricots fluctuates widely but over periods of years, production tends to run in cycles rather than follow a consistent trend. Reaching a peak in the early 1930's, production then receded only to advance to new highs during the middle 1940's. Since then, production has declined again and in recent years has averaged around 200,000 tons annually.

Bearing Acreage.--The widely variable production of apricots has come from a bearing acreage which has trended slowly but generally downward. The over-all bearing acreage trend is embodied in the next tabulation.

Apricot bearing acreage reached a peak at the end of the 1920's. Since then, a persistent downward trend prevailed, with a leveling off in the middle 1940's but only to be followed by a steep fall during 1947-1950. Since 1950, apricot bearing acreage has receded but only very slightly. Nonbearing followed a downward course rapidly declining during the latter half of the 1930's and less rapidly but persistently since then.

Apricots: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 acres	
1924-1928	74.1	74.1
1929-1933	84.7	83.1
1934-1938	80.2	75.7
1939-1943	74.5	69.3
1944-1948	--a/	66.1
1949-1953	--	45.9

a/ Dashes indicate data not available.

Yield:--The highly variable annual yields are not fully submerged by even the five-year averages. In very broad terms, the yield trend has followed an upward course, being particularly pronounced in recent years. In 1949-1953, the yield averaged 4.13 tons compared with 2.99 in 1929-1933 and 2.25 in 1924-1928.

Apricots: Yield Per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	2.27	2.25
1929-1933	2.94	2.99
1934-1938	2.87	2.86
1939-1943	2.68	2.57
1944-1948	--a/	3.56
1949-1953	--	4.13

a/ Dashes indicate data not available.

| | | |

The comparative trends in production, acreage, and yield of California apricots are pictured in Figure 9. There may be seen that the annual fluctuations in production have been heavily dominated by varying yields. The indexes indicate that the generally declining trend in bearing acreage has in large part been offset by the upward trend in yield.

Sales, Total and Fresh.--To indicate the shifting relative proportion of the apricot crop going to the fresh market, the following five-year averages are presented:

Apricots: Sales, Total and Fresh

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1924-1928	--[a/]	--	165.8	11.5
1929-1933	241.0	24.2	235.6	19.3
1934-1938	226.0	25.1	214.3	16.2
1939-1943	195.3	30.8	175.1	16.8
1944-1948	256.5	45.9	228.5	25.2
1949-1953	197.6	30.9	184.9	20.2

a/ Dashes indicate data not available.

Total sales of apricots moved along with production noted above. The sale of fresh apricots has tended to be slightly more stable from year to year than total sales, with variability in the crop being absorbed more in the dried and canned apricot markets. In the postwar years, the proportion of the apricot crop going to the fresh market (10-11 per cent) is larger than in the prewar years (7-8 per cent). The fresh outlet has tended to absorb a slightly increasing proportion of the crop over the years in terms of a percentage trend. A complete account of this development entails a detailed examination of developments in the dried and canned outlets, with the former being influenced by the export situation and the latter being influenced by other canned fruits.

The comparative trends in production, acreage, and yield of California apricots are pictured in Figure 9. There may be seen that the annual fluctuations in production have been heavily dominated by varying yields. This tendency indicates that the generally deepening trend in bearing acreage has in large part been offset by the upward trend in yield.

Price, Income and Yield.--To indicate the ability relatives production of the apricot area going to the fresh market, the following five-year averages are presented:

[illegible] Price, Total and Mean

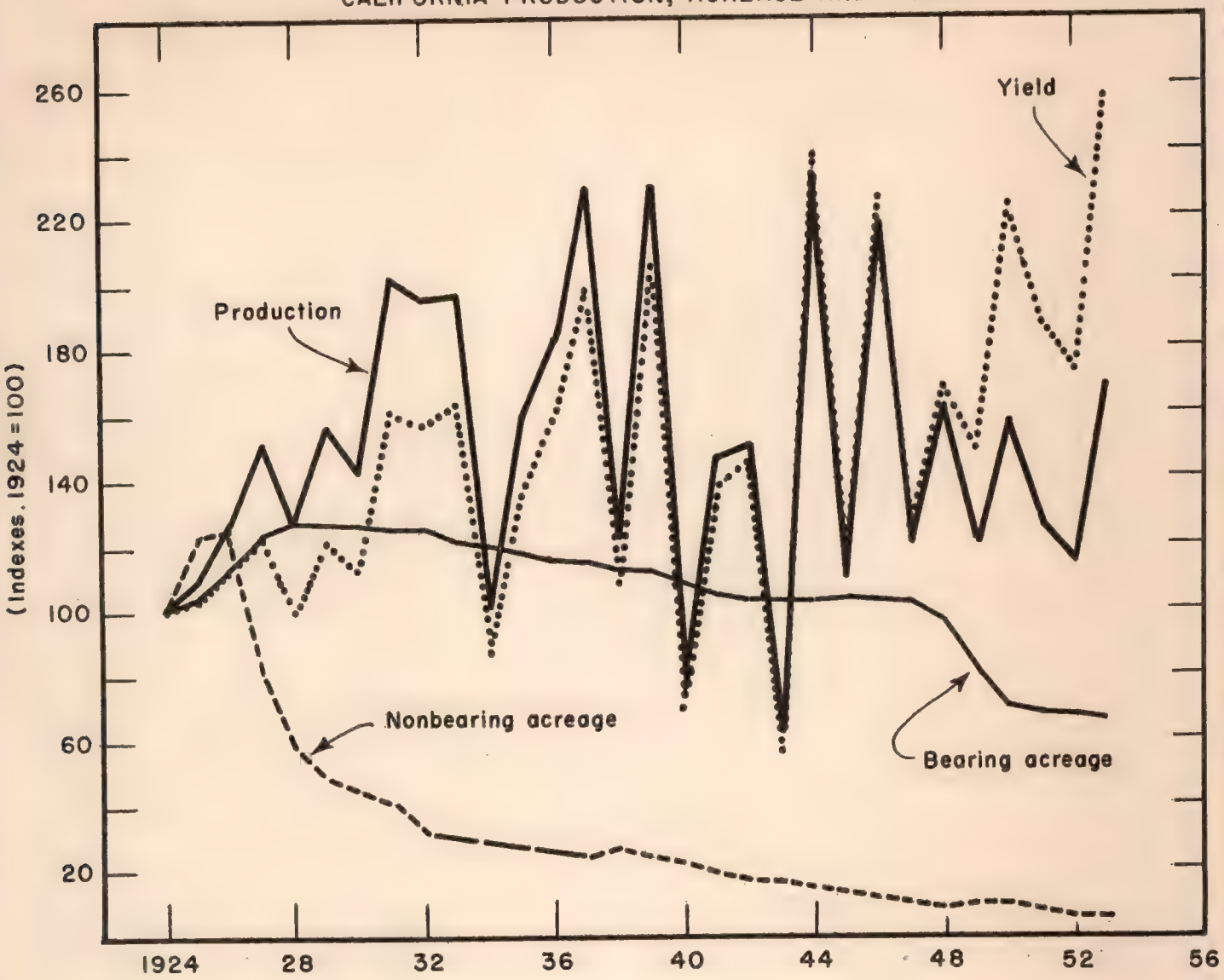
[illegible]	[illegible]	[illegible]	[illegible]
[illegible]-1926	--1/	165.8	11.5
[illegible]-1929	[illegible]	[illegible]	10.1
1931-1935	226.0	25.1	21.3	14.2
1939-1943	245.3	36.8	17.1	14.8
1944-1948	256.5	45.2	228.5	21.2
[illegible]-1953	197.6	30.5	184.9	20.2

1/ Income indicate data not available.

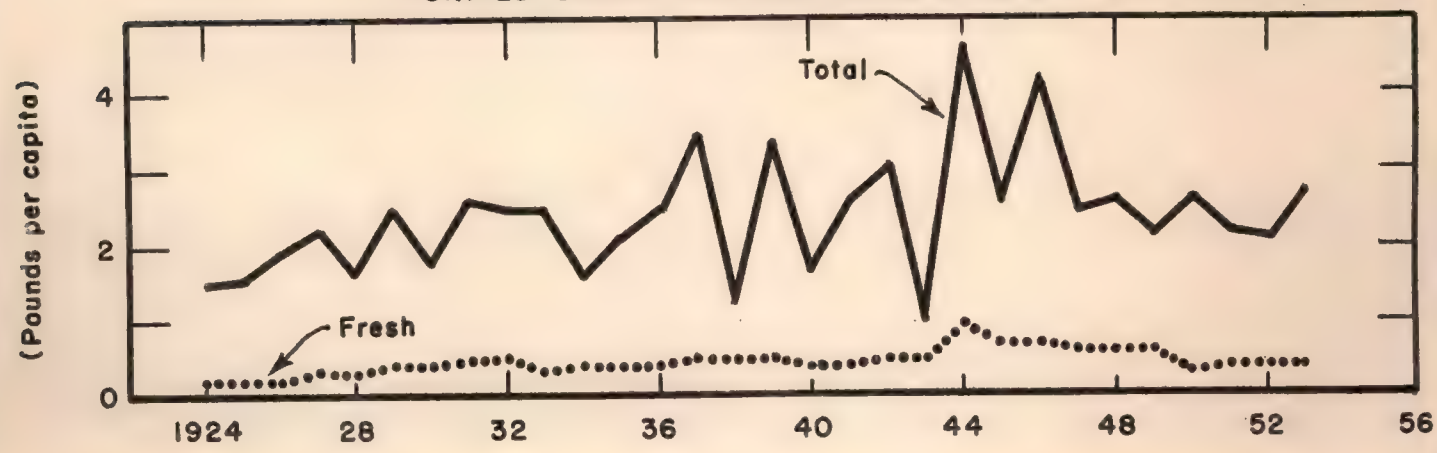
Total sales of apricots moved along with production noted above. The sale of fresh apricots has tended to be slightly more stable from year to year than total sales, which vary relatively in the crop being shunted to the dried and canned product markets. In the postwar years, the proportion of the apricot crop going to the fresh market (10-11 per cent) is larger than in the prewar years (7-8 per cent). The last outlet has tended to absorb a slightly increasing proportion of the crop over the years in terms of a percentage trend. A comparable comment of this development entails a detailed examination of developments in the dried and canned outlets, with the former being influenced by the raisin situation and the latter being influenced by other canned fruits.

FIG. 9 APRICOTS; PRODUCTION, ACREAGE AND YIELD AND PER CAPITA DISAPPEARANCE

CALIFORNIA PRODUCTION, ACREAGE AND YIELD



UNITED STATES PER CAPITA DISAPPEARANCE



Grower Prices.--To indicate the general course of prices received by farmers for apricots, the following five-year averages are presented:

Apricots: California Grower Prices

Period	California
	annual averages for five-year periods; dollars per ton
1924-1928	58.16
1929-1933	36.76
1934-1938	42.76
1939-1943	68.80
1944-1948	97.32
1949-1953	104.18

The broad movements in farm prices are reflected in the above averages. Of particular interest is the relatively high average for the more recent post-war years. Although by 1948 there was a substantial decline from the wartime high (1943), after 1950 relatively high prices were attained again. Here again demand for canning apricots was in large part responsible.

Per-Capita Disappearance, Total and Fresh.--Now, we consider the situation in per-capita disappearance of apricots. Again, total per capita is contrasted with fresh per capita. For this purpose, the following five-year averages were computed:

Apricots: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use	Products (canned and dried)
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	1.7	0.2	1.5
1929-1933	2.4	0.4	2.0
1934-1938	2.2	0.4	1.8
1939-1943	2.3	0.5	1.8
1944-1948	3.3	0.7	2.6
1949-1953	2.4	0.4	2.0

[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]
[illegible]	[illegible]

Up to the middle 1940's, the per-capita disappearance of apricots in all uses combined followed a slight upward trend. After the highs in 1944 and 1946, the level receded to about 2.4 pounds per capita which is near the average figure for the 1930's. Thus, as a broad generalization, for the period as a whole since the middle 1920's, the over-all per-capita disappearance of apricots has just about kept pace with population growth.

The per-capita disappearance of fresh apricots followed a slight upward trend until about 1949. Since then, per-capita fresh level has averaged somewhat lower, approaching the level prevailing during the 1930's. As a general statement, one might say that the per-capita disappearance of fresh apricots in recent years has not maintained its previous expansion and during the past several years has been near the level prevailing during most of the 1930's.

Fresh Apricot Exports.--Although exports of fresh apricots do not make up a significant proportion of the total crop, they do in some years comprise a meaningful percentage of total fresh disappearance. Recognizing variation in fresh apricot exports, with some years having hardly any export market, other years have experienced a relatively substantial export market. In 1950, about 10 per cent of total fresh disappearance went to export outlets. The export market for fresh apricots, moreover, has over the years maintained its relative position in the disposition of the supply going to fresh use.

Apricots: United States Fresh Exports

Period	Fresh exports	Fresh exports as per cent of total fresh sales
	annual averages for five-year periods	
	1,000 tons	per cent
1939-1943	1.7	5.4
1944-1948	1.6	3.5
1949-1953	2.3	7.4

Cherries

Cherries are processed as well as shipped fresh, the particular utilization depending upon location of production, variety, and whether "sweet" or

Up to the middle 1950's, the near-unit disappearance of particle in all urea combined followed a similar upward trend. After the phase in 1948 and 1949, the level receded to about 1.5 percent per capita-ration in area the average life-time the 1950's. There, as a short generalization, for the decade no a whole range the whole 1960's, the cow-all near-zero a disappearance of available but just above high with population growth.

The near-zero disappearance of urea process followed a similar upward trend until about 1965. Since then, near-zero trash level has occurred approximately the level observing during the 1950's. In a power statement, one might say that the per-capita change rates of fuel-petroleum in recent years has not continued its previous exponential growth but now exist years has been near the level prevailing during most of the 1950's.

Explaining Recycling.--Although opposite of trash available do not quite be simplification production of the total crop, they do in some sense comprise a meaningful portrayal of total fuel dependence. Investigating variation in these opposing economic, with some sense reading per by any except method, other years new experienced a relatively unchanged aspect period. In 1967, about 70 per cent of total fuel disappeared into the energy outlets. The other fuel for fuel products, however, has over the years maintained its relative position in the disposition of the supply going to final use.

"sour" cherries are involved. In this sketch, all such distinguishing features are submerged, with attention directed to the situation in California compared with the country at large and developments in the fresh contrasted with the processed markets.

Production.--At the outset, as for the other deciduous fruits, we consider the broad trends in cherry production. Period averages are as follows:

Cherries: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	83.1	14.8
1929-1933	125.6	19.8
1934-1938	139.7	21.3
1939-1943	166.3	23.6
1944-1948	191.2	30.1
1949-1953	231.1	32.3

With wide year-to-year swings, particularly in California, cherry production has over the years increased very substantially. When the averages for 1924-1928 and 1949-1953 are compared, we find that national cherry production increased 180 per cent and that California cherry production increased 120 per cent. Thus, although distributed unevenly among the producing areas, over-all production has increased at a marked rate. Therefore, it is helpful to review the determinants of production.

Acreage.--National bearing acreage of cherries rose slowly and then moderately during the latter half of the 1920's. And in the early 1930's, there was a sharp rise but only to be followed by a leveling off until the middle 1940's. In California, cherry bearing acreage increased at a substantial rate from 1924-1938. Beginning the next year and continuing on to 1950, California bearing acreage fell off. After 1950, the decline was arrested and some slight increase was reflected.

Cherries: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 bearing acres	
1924-1928	73.0	10.2
1929-1933	89.3	13.1
1934-1938	106.1	14.5
1939-1943	105.8	13.3
1944-1948	--[a]	12.1
1949-1953	--	9.5

a/ Dashes indicate data not available.

California nonbearing acreage of cherry trees was at a high peak in 1926 and 1927. From then until 1946, a sharp decline occurred first precipitously and then slowly. Some recovery developed during 1947-1950 and during the past several years has been stable at a level of about 70 per cent of that in 1924. During much of the period, the trends in California bearing and nonbearing acreage were in opposite directions, although both have been relatively stable since 1950.

Yield.--Differences have existed in the yield experience of California cherries compared with the country at large. The major differences are reflected in the following five-year averages:

Cherries: Yield Per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	1.14	1.46
1929-1933	1.40	1.51
1934-1938	1.32	1.46
1939-1943	1.57	1.77
1944-1948	--[a]	2.47
1949-1953	--	3.38

a/ Dashes indicate data not available.

a/ Trades include data not available.

a/ Imports reflects data not available.

The upward trend in cherry yield, particularly since the middle of the 1930's, is evident from the above averages. In fact, increased yield was sufficiently strong so that it offset the decline in number of bearing acres and thus resulted in the rising trend in production. With the recovery in nonbearing acreage in California in recent years and, if the level of yield is maintained, there is likelihood of further increase in cherry production. This, of course, presumes that withdrawal of acreage will not more than offset the tonnage becoming available through newly bearing cherry trees. The statistical basis for such developments are summarized in Figure 10, which shows the comparative trends in production, acreage, and yield.

Sales, Total and Fresh.--We now consider total farm sales of cherries and the volume moved into fresh-use channels. The pertinent five-year averages are as follows:

Cherries: Sales, Total and Fresh

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1924-1928	72.9	--[a]	14.4	8.7
1929-1933	101.5	--	18.8	10.5
1934-1938	121.9	46.6	20.1	10.7
1939-1943	147.8	46.7	21.5	12.0
1944-1948	179.1	46.5	29.8	13.6
1949-1953	215.7	47.1	32.0	14.7

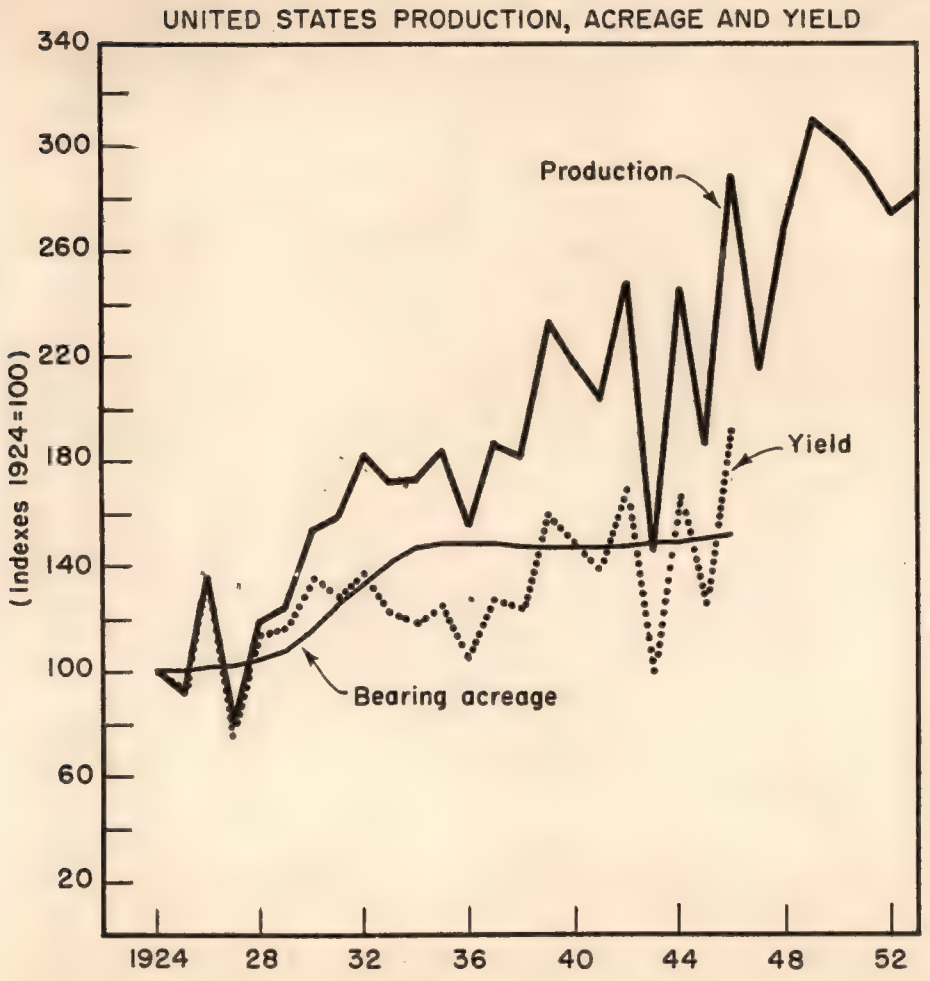
a/ Dashes indicate data not available.

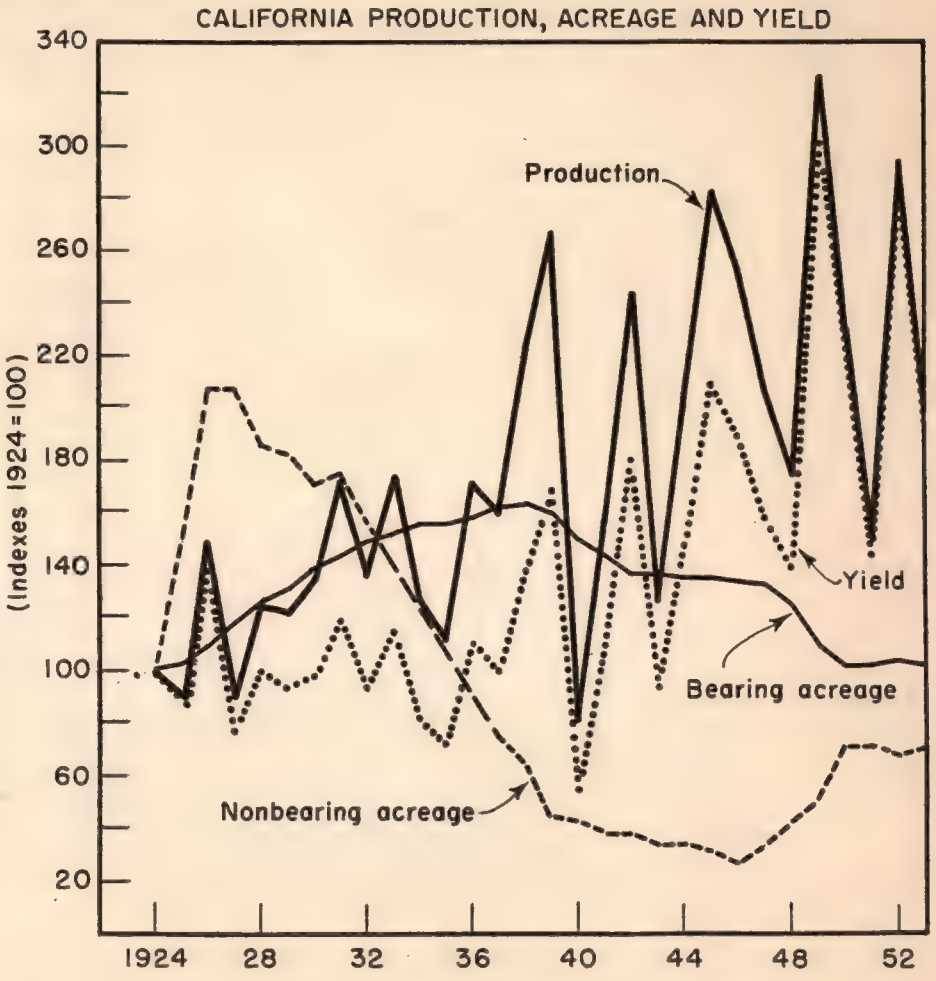
The above data reflect the fact California-produced cherries enter into fresh-use channels in a greater proportion than do cherries in the country at large. Yet, for both California and the nation, fresh cherry sales in the postwar years make up a smaller proportion of the respective total sales than was usual in the prewar sales. In the prewar years, the California fresh sales proportion averaged about 55 per cent and the national fresh sales proportion

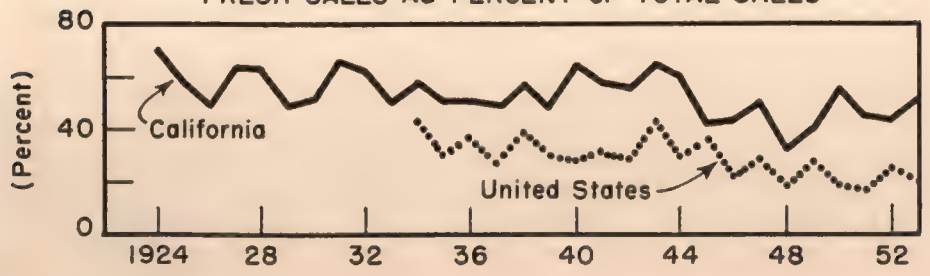
[illegible]	72.9	—a/	17.4	8.7
[illegible]	173.5	—	15.8	10.7
[illegible]	103.2	46.6	20.1	10.1
[illegible]	15.8	46.7	21.5	14.9
[illegible]	179.1	46.2	23.6	13.6
[illegible]	99.2	50.1	20.0	10.7

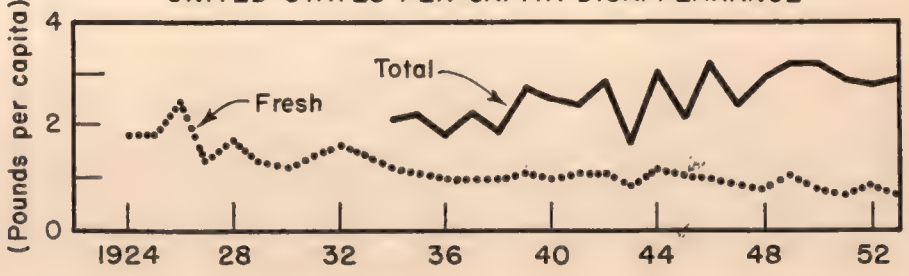
a/ Dashes indicate data not available.

FIG. 10 CHERRIES; PRODUCTION, ACREAGE AND YIELD, SALES AND PER CAPITA DISAPPEARANCE









averaged about 35 per cent; for the postwar years, in contrast, the California figure is about 45 per cent, and the national figure is near 25 per cent. Thus, although fresh cherry sales have followed an upward trend, its rate of rise is less than that for total sales of cherries. It should be noted, however, that California fresh cherry sales in the postwar years have well maintained their proportion of all sales of California cherries and, moreover, there has been a slight increase in the proportion trend. This has not been the case for United States cherries; their proportion going to fresh market has tended to follow a declining trend in the postwar years.

Grower Prices.--The differential grower prices for cherries in California and for the national situation are summarized as follows by five-year averages:

Cherries: Grower Prices

Period	United States	California
	annual averages for five-year periods; dollars per ton	
1924-1928	146.78	162.00
1929-1933	90.00	111.40
1934-1938	75.23	114.20
1939-1943	115.58	153.06
1944-1948	242.60	290.66
1949-1953	181.00	267.00

Not only have California farm prices for cherries over the years been above the national average farm price, but the spread has tended to widen. The difference has varied from year to year, but when the experience is averaged, a widening differential emerges. Further may be noted that during the postwar years, the California grower prices for cherries tended to hold up while the national prices declined more sharply from their wartime high.

Per-Capita Disappearance, Total and Fresh.--In view of the increased production of cherries, it is pertinent to note how growth in production and its utilization compared with population increase. The following five-year per-capita averages indicate what has occurred:

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

Cherries: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use	Products
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	--[a]	1.8	--
1929-1933	--	1.4	--
1934-1938	2.0	1.1	0.9
1939-1943	2.4	1.0	1.4
1944-1948	2.7	1.0	1.7
1949-1953	3.0	0.8	2.2

a/ Dashes indicate data not available.

These per-capita averages clearly indicate that over-all per-capita disappearance of cherries has followed an upward trend, at least since the middle 1930's. But during the period surveyed, per-capita disappearance of cherries in fresh form has been declining. The decline was arrested during the 1940's but set in again in recent years. And while per-capita disappearance of fresh cherries has trended down, there has been an increase in the per capita used of processed cherries, canned and brined. Thus, in cherries as in some other deciduous fruits, per-capita disappearance in the fresh market is losing ground.

Exports.--Although exports of fresh cherries have not been a large item, it may be noted that the foreign market outlet is of significance and has increased during the past decade and a half. Exports averaged about 500 tons during 1939-1943, about 600 tons during 1944-1948, and rose to 900 tons in 1949-1953 or about 2 per cent of United States total fresh annual disappearance during that period. Most of those exports were to Canada and other near areas which comprise a significant part of our export market for fruits.

Grapes

In terms of tons produced, grapes in California are the leading noncitrus fruit and, in recent years for the country at large, their tonnage has exceeded

apples (commercial basis). But not only in terms of volume are grapes a dominant fruit. They enter commercial outlets in large volume through drying into raisins, through crushing into wines, and as fresh shipments. A mixture of varieties, some oriented primarily to a particular outlet but many varieties used in two or three outlets, presents a complicated picture of utilization. Since here we are mainly concerned with sketching background for consideration of fresh versus other outlets, the trends in production, acreage, and yield are reviewed for grapes in the aggregate.

Production.--The trend of grape production during the past three decades is revealed by the following five-year averages which indicate California's dominant position:

Grapes: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	2,320.5	2,085.2
1929-1933	2,072.4	1,782.8
1934-1938	2,346.0	2,118.6
1939-1943	2,600.2	2,394.8
1944-1948	2,936.2	2,772.4
1949-1953	2,912.2	2,716.6

After a rise and then decline during the latter half of the 1920's, overall grape production followed an upward trend. Although production during 1949-1953 averaged about the same (slightly under) as of 1944-1948 which suggests a leveling out of the long-term trend, there may well be further growth in production. Bearing acreage and yield may both increase.

Acreage.--Aside from a hump in the 1924-1934 period, grape bearing acreage in California has been remarkably stable, in a trend sense, for such a heterogeneous industry. Although bearing acreage has fallen off slightly during the past several years, the change is not a strong one. The major characteristics of the bearing acreage trend are shown by five-year averages as follows:

1934-1938	2,320.5	3,088.2
[illegible]	2,072.8	1,762.8
[illegible]	[illegible]	[illegible]
1919-1923	2,660.2	3,394.3
[illegible]	[illegible]	[illegible]
1914-1918	2,612.2	3,772.6

Grapes: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 bearing acres	
1924-1928	731.6	543.6
1929-1933	730.9	530.4
1934-1938	657.8	481.3
1939-1943	627.1	486.6
1944-1948	--a/	495.0
1949-1953	--	471.6

a/ Dashes indicate data not available.

Since it is clear that the expanded production noted earlier is from an acreage that has not increased, yield must have played a significant role.

Yield.--The major features of the grape yield experience are included in the five-year period averages:

Grapes: Yield Per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	3.16	3.82
1929-1933	2.83	3.36
1934-1938	3.58	4.40
1939-1943	4.15	4.92
1944-1948	--a/	5.60
1949-1953	--	5.76

a/ Dashes indicate data not available.

The very substantial growth in yield since the early 1930's, it is clear, accounts for the significant growth in grape production. As may be seen from

a/ Series indicate data not available.

a/ Series indicate data not available.

Figure 11, the indexes of annual production move along with the indexes of annual yield while the indexes of bearing acreage vary only slightly since the middle 1930's.

Nonbearing grape acreage in California has changed considerably over the years. After falling at first sharply and then slowly during 1924-1932, an upward trend developed with its peak reached in 1947; since then, there has been a downward phase in nonbearing grape acreage. And in the past year or two, the level of nonbearing acreage may not have been sufficient to offset natural loss of bearing acreage or maintain bearing acreage currently.

Sales, Total and Fresh.--A basic indication of the relative position of fresh grape marketings is a comparison of farm sales in total and fresh. Such indicators are the following five-year averages:

Grapes: Sales, Total and Fresh

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1924-1928	2,181.4	--[a]	1,989.2	958.0
1929-1933	1,963.4	--	1,720.9	668.0
1934-1938	2,301.2	623.1	2,115.1	492.7
1939-1943	2,563.8	575.5	2,391.6	505.2
1944-1948	2,909.0	545.9	2,767.3	515.8
1949-1953	2,889.5	563.3	2,713.9	540.0

a/ Dashes indicate data not available.

In the middle 1920's, California fresh grape sales were nearly half of total sales of California grapes. In the late 1920's, a decline began in the fresh proportion, and by the end of the 1930's it averaged less than 25 per cent. In the postwar years, the fresh proportion has varied about 20 per cent of total sales of California grapes. The trend in tons, or absolute terms, reflects a downward phase from 1924-1928 to 1934-1938 and then an upward phase from 1939-1943 to 1949-1953. It may well be that the high level of fresh sales during the earlier

Figure 11, the indexes of annual production move along with the indexes of annual yield while the indexes of bearing acreage vary only slightly above the trend.

Declining price acreage in California has changed considerably over the years. After falling at first slowly and then sharply during 1929-1933, it resumed trend declined with its early peaked in 1937; since then, there has been a downward phase in nonbearing price category, and in the past year or two, the level of nonbearing acreage may not have been sufficient to offset normal loss of bearing acreage or reduced bearing acreage commercially.

Figure 12 shows the basic indicators of the relative position of fresh grape production in a comparison of farm value in bowl and fresh. Such indications are the following three-year averages:

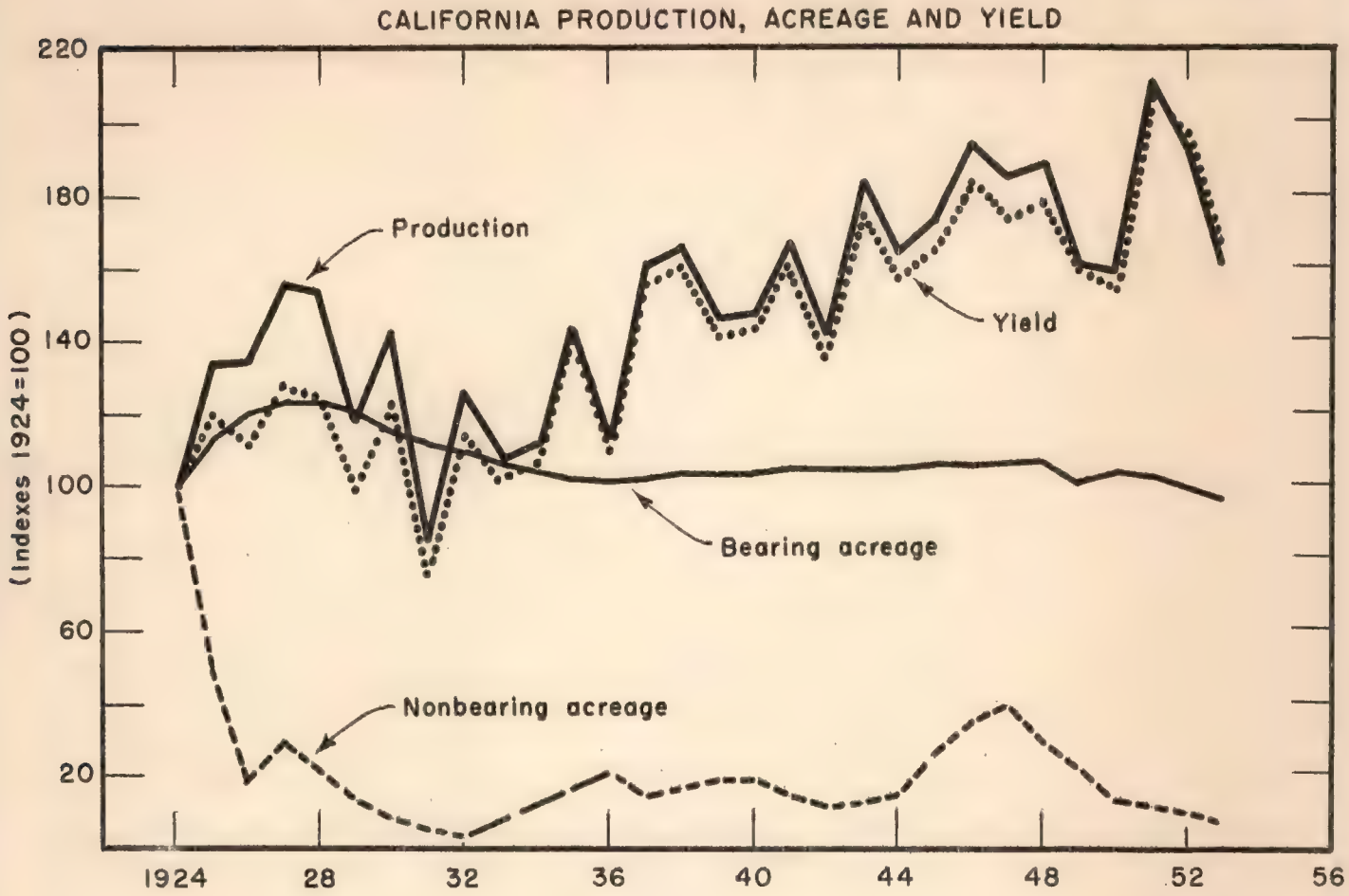
Source: Table 141 and [illegible]

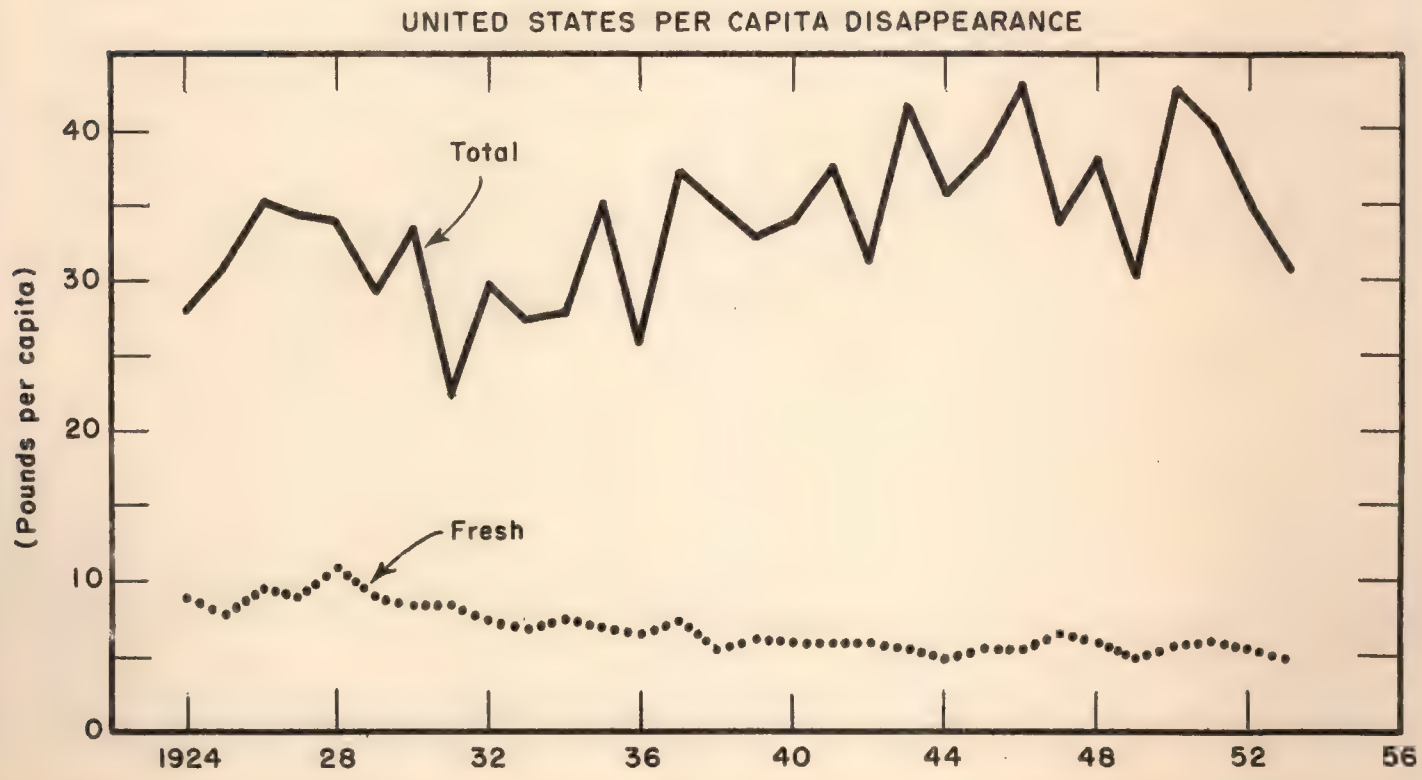
[illegible]	[illegible]	[illegible]	[illegible]
1931-1933	2,301.4	[illegible]	1,613.2	69.9
[illegible]	[illegible]	[illegible]	[illegible]
1934-1936	2,711.2	642.3	2,154.2	79.4
[illegible]	[illegible]	[illegible]	[illegible]
1937-1939	2,409.1	515.7	2,187.3	83.8
1940-1942	2,805.5	638.3	2,372.5	84.6

[illegible] Includes fresh apricots not in bowl.

In the decade 1920's, California local grape acres were nearly half of total value of California crops. In the late 1920's a decline began in the fresh production, and by the end of the 1930's it amounted less than 25 per cent. In the postwar years, the fresh production has varied about 20 per cent of total value of California crops. The trend in tons, or absolute terms, reflects a downward phase from 1931-1932 to 1938-1939 and then an upward phase from 1939-1942 to its peak. It may well be that the slow trend of fresh sales during the earlier

FIG. 11 GRAPES; PRODUCTION, ACREAGE AND YIELD AND PER CAPITA DISAPPEARANCE





years, say 1924-1932, reflected fresh sales destined for other than fresh consumption. Of significance is that, in recent years, the fresh outlet of California grapes has maintained its relative volume compared with the over-all growth in grape production and total sales.

Per-Capita Disappearance, Total and Fresh.--We now look at the developments in per-capita disappearance of grapes and grape products. Recognizing here the differing nature of various grape products, they are all grouped together to distinguish them from grapes consumed fresh. The relevant five-year averages are as follows:

Grapes: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use	Products
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	32.5	9.3	23.2
1929-1933	28.5	8.1	20.4
1934-1938	32.2	6.7	21.5
1939-1943	35.5	6.0	29.5
1944-1948	37.8	5.7	32.1
1949-1953	35.7	5.4	30.3

The irregularly rising course of per-capita disappearance of grapes (all uses combined) is reflected in the above averages. But the upward course is due to the expanded per-capita disappearance of grape products. The per-capita disappearance of fresh grapes has persistently followed a downward trend. The per-capita measures for 1944-1948 and 1949-1953 are only slightly different, yet, the difference is one of a decline. But the per-capita disappearance of all uses combined, and grape products as well, also declined between the two most recent five-year averages. It is reasonably clear, however, that, as a generalization, the grape products outlets have trended up with population growth while the fresh grape outlet has failed to follow the pace of population growth.

Exports.--The export market for fresh grapes has accounted for only a minor proportion of fresh disappearance of grapes. Yet, since the export market has grown over the years, and since its potential for fresh grapes may not be fully appreciated, the relevant data are summarized in the form of five-year averages:

Grapes: United States Fresh Exports

Period	Fresh exports	Fresh exports as per cent of total fresh sales
	annual averages for five-year periods	
	1,000 tons	per cent
1924-1928	16.8	--[a]
1929-1933	18.0	--
1934-1938	27.0	0.4
1939-1943	27.8	0.5
1944-1948	34.4	0.6
1949-1953	50.2	0.9

a/ Dashes indicate data not available.

The above averages indicate the upward trend in fresh grape exports. Also may be noted that the exports have increasingly become a larger proportion of fresh sales.

Freestone Peaches

Freestone peaches, another important deciduous fruit, are produced in a number of areas. Dominant producing areas include Colorado, Arkansas, Michigan, Georgia, the Carolinas, and Washington, as well as California. But only in California do freestone peaches go to the drying outlet in any significant amount, and California is also the leading state for canning freestones although significant amounts are at times canned in other states.

Since the fresh market outlet is by far the major destination for freestones in all states other than California, the utilization (fresh versus processed)

1/ Dashes indicate data not available.

The above averages indicate the upward trend in fresh grape exports. Also may be noted that the exports have increasingly become a larger proportion of fresh sales.

[illegible]

Since the fresh market outlook is by far the major destination for fresh-type [illegible] stocks other than California, the utilization (fresh versus processed)

trends are of interest for all producing areas including California. In this sketch, clingstone peaches are largely disregarded since they are primarily used in canning and our interest in this report is oriented in the main to developments in the fresh deciduous fruit markets.

Production.--To indicate briefly the extent and volume trend in freestone peach production, the following five-year averages are presented for the country as a whole and for California.

Freestone Peaches: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	1,039.4	200.0
1929-1933	933.2	213.8
1934-1938	954.1	177.0
1939-1943	1,106.9	241.0
1944-1948	1,305.6	287.0
1949-1953	962.0	260.8

These data indicate that for the country at large there has been a general tendency for freestone peach production to follow an upward trend, although in the recent postwar years production average receded to the level prevailing at the end of the 1930's.

In California, freestone peach production has also generally trended up, but irregularly. During the middle 1930's, California production declined giving a relatively low average for 1934-1938. But, thereafter, freestone production in California advanced fairly sharply to a record peak in 1946. After that, production declined for two years and then recovered in part. During the past several years, however, California freestone production has maintained higher levels than in preceding periods excepting the wartime peak years.

Acreage.--As one of the determinants of production, bearing acreage has followed a varying trend during the past three decades. To compare acreage trend developments in the country and in California, the following five-year averages are presented:

Freestone Peaches: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 bearing acres	
1924-1928	677.4	56.9
1929-1933	621.7	52.2
1934-1938	572.7	41.1
1939-1943	576.5	37.5
1944-1948	--a/	39.7
1949-1953	--	32.3

a/ Dashes indicate data not available.

For the country at large, bearing acreage of freestone peach trees trended downward from 1924 until 1939. Beginning with 1940 until 1946, the last year for which reliable national acreage figures are available, acreage trended upward, although the inference can be made that the forward surge did not continue in view of what is known about production.

In California, for which more complete bearing acreage data are available, the situation is as follows: bearing acreage declined rapidly during 1930-1936 and then slowly until about 1940. Thereafter, a slight increase developed but continued only until 1946-47 after which a decline set in for several years. During the past 5 or 6 years, California freestone bearing acreage has been stable at about 55 per cent of the 1924 level. The long-term downward trend in California bearing acreage of freestone peach trees did not, however, pull production fully in the same direction due to partial effects of yield.

Yield.--The trend developments in freestone peach yield per bearing acre are summarized, by five-year averages, in the next tabulation.

First may be noted the substantial extent to which California freestone yield experience exceeds that of the country at large. National yield trended upward during the period for which data are available and likely increased thereafter somewhat. California freestone yield, it is clear, has increased substantially in a trend sense.

Freestone Peaches: Yield per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	1.54	3.52
1929-1933	1.50	3.98
1934-1938	1.67	4.64
1939-1943	1.93	6.42
1944-1948	--[a]	7.22
1949-1953	--	8.07

a/ Dashes indicate data not available.

Notwithstanding year-to-year fluctuations, California freestone peach yield has followed a strong upward trend. This was particularly so through the period ending in the middle 1940's; since then, the trend continued upward but not as sharply as earlier. It is of significance that the increased yield trend was sufficiently strong so as to more than offset the declining trend in bearing acreage. The lower level of production in the later postwar years was due to receded acreage since yields were maintained.

The trend of nonbearing acreage of freestone peaches in California has varied around a long-term decline trend. Yet during the past 10 years, nonbearing acreage has approached a level short-term trend at about 45 per cent of the nonbearing acreage in 1924.

The relative movements of production, acreage, and yield of freestone peaches are shown by the indexes in Figure 12. There may be noted the interactions of acreage and yield with the resultant effects on the production trend.

Sales, Total and Fresh.--To indicate the relative position and trend in farm sales of fresh peaches compared with total sales, five-year averages are considered in the next tabulation.

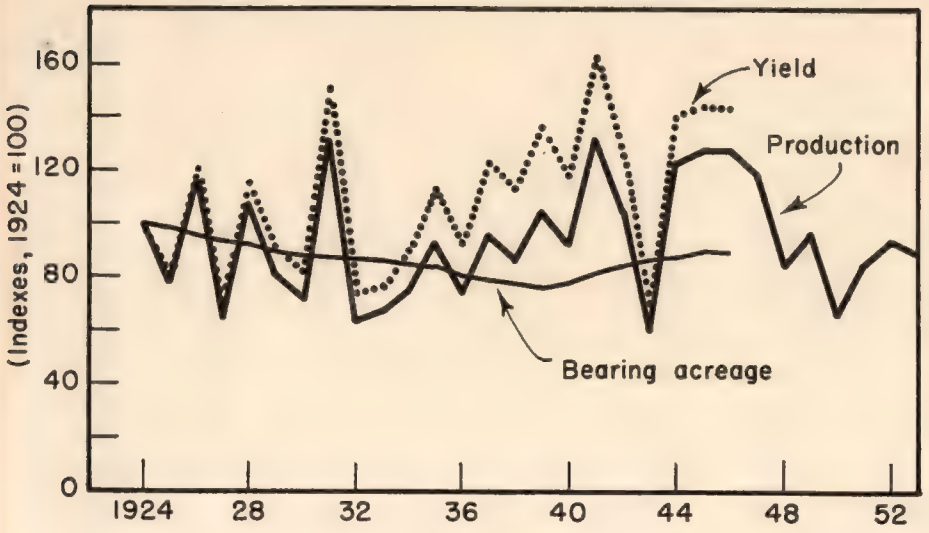
The following data clearly emphasize that sales for fresh use comprise a larger proportion of the national freestone crop than is the case for California freestone peaches. The drying and canning markets are important for California

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

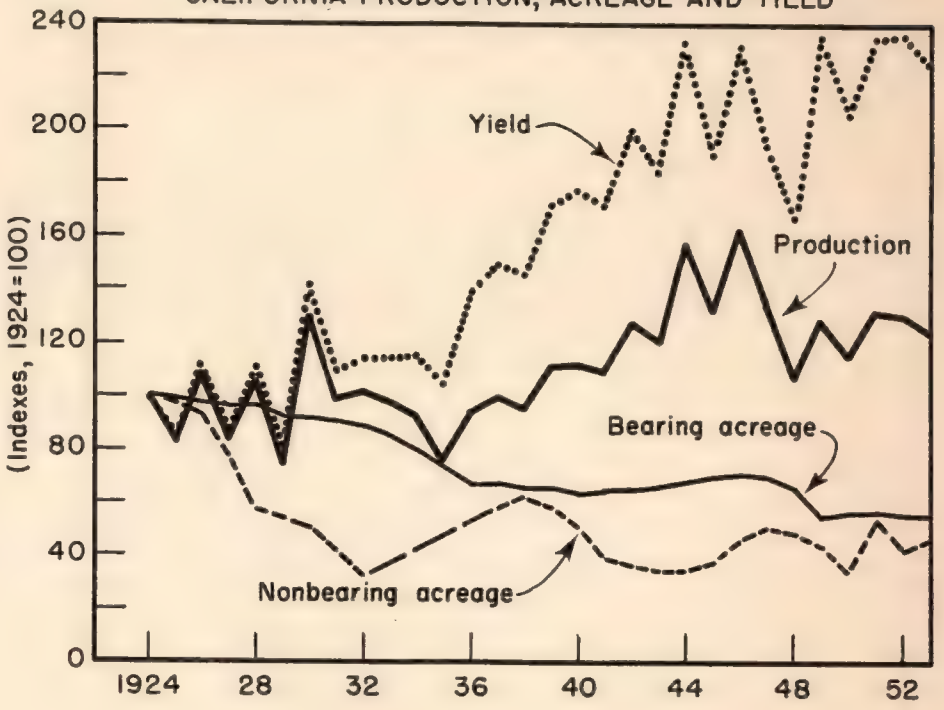
[illegible] [illegible] [illegible] [

FIG. 12 FREESTONE PEACHES, PRODUCTION, ACREAGE AND YIELD, SALES AND PER CAPITA DISAPPEARANCE

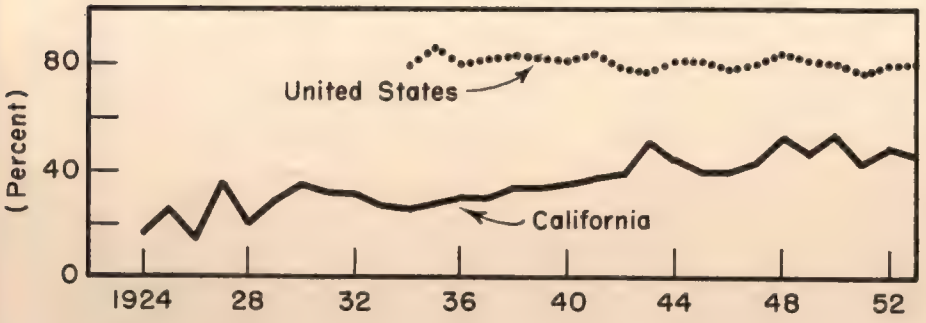
UNITED STATES PRODUCTION, ACREAGE AND YIELD



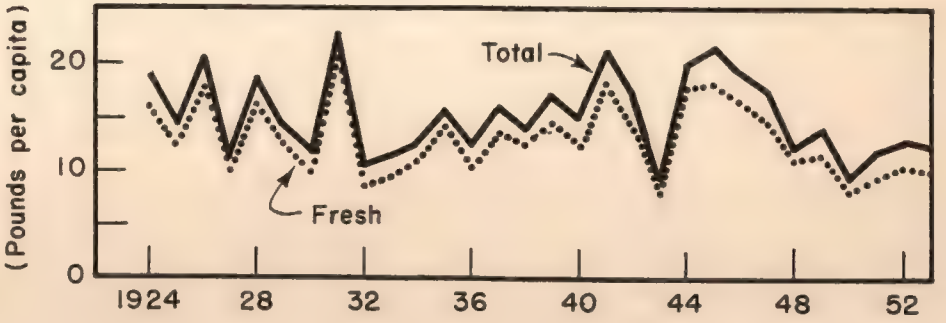
CALIFORNIA PRODUCTION, ACREAGE AND YIELD



FRESH SALES AS PERCENT OF TOTAL SALES



UNITED STATES PER CAPITA DISAPPEARANCE



freestones. For the country at large, fresh sales move along with total sales; they both trended upward until the end of 1948, then receded. But for California, fresh freestone sales trended upward through 1948, and thereafter maintained about the level of 1944-1948.

Freestone Peaches: Sales, Total and Fresh

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1924-1928	828.3	--[a]	196.0	42.9
1929-1933	756.7	--	205.2	64.1
1934-1938	809.4	665.0	187.0	55.8
1939-1943	957.6	775.1	238.0	93.7
1944-1948	1,161.9	935.3	283.4	122.7
1949-1953	860.4	678.4	258.8	122.0

a/ Dashes indicate data not available.

Another way of looking at the relative trends is to consider the proportion which fresh sales are of total sales. For the country at large, that proportion has fluctuated near 80 per cent since 1934, with no discernible trend in the proportion. For California freestone peaches, the fresh proportion averaged 20 per cent in the middle 1920's and rose to an average of about 50 per cent in 1948-1950. In the past several years, about 45 per cent of California freestone peach sales went to the fresh market. The growth in California freestone peach canning has, in the past several years, absorbed volume at the expense of the relative amount going to the fresh market.

Grower Prices.--To compare the trends in prices received by growers of freestone peaches in the country at large and in California, five-year averages are presented in the next tabulation.

Grower prices for freestone peaches broadly followed the general price swings for fruits, with decline during the 1930's depression, recovery to wartime highs, then short-term declines, followed by recent advances. Generally, grower prices

1939-39	809.4	652.0	1874.0	35.3
1938-39	871.6	775.1	738.0	84.7
1938-38	1,122.0	762.3	388.4	
1937-38	960.4	679.4	956.8	

a/ Dashes indicate data not available.

for freestones in California followed the same general course, yet two distinguishing features may be noted. Prices received by California freestone growers have been below the national average. This is related in part to the earlier noted fact that a smaller proportion of California freestones moves to the fresh market. Another feature is that the price spread between California and national average grower prices has narrowed over the years. Whereas, the average spread was over $21.00 per ton in 1924-1928 and $14.00 per ton in 1929-1933, the average spread had narrowed to $7.75 per ton in 1944-1948 and about $2.50 per ton in 1949-1953.

Freestone Peaches: Grower Prices

Period	United States[a]	California
	annual averages for five-year periods; dollars per ton	
1924-1928	51.67	30.33
1929-1933	37.50	23.50
1934-1938	37.92	24.33
1939-1943	55.83	45.00
1944-1948	84.58	76.83
1949-1953	78.33	75.75

a/ Grower prices for United States include all peaches.

Per-Capita Disappearance, Total and Fresh.--In view of the production and sales trends noted above, we now consider the trend developments in per-capita disappearance of freestone peaches. The relevant five-year averages which suggest the per-capita trends are considered in the next tabulation.

A consistent trend in the per-capita disappearance of freestone peaches has not prevailed. Total (all uses combined) per-capita disappearance declined after the 1924-1928 period but then advanced to a high of 18.1 pounds for 1944-1948. But the per-capita figure (all uses) fell sharply during 1949-1953, reflecting reduced production level of those years in the face of an increased population.

Freestone Peaches: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use	Products
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	16.9	14.5	2.4
1929-1933	14.2	12.4	1.8
1934-1938	14.1	12.4	1.7
1939-1943	15.9	13.6	2.3
1944-1948	18.1	15.4	2.7
1949-1953	12.1	9.8	2.3

The per-capita trend of fresh disappearance of freestone peaches generally behaved as indicated above for all uses, with a peak in 1944-1948, only to be followed by a sharp reduction for 1948-1953. In both total and fresh uses, the per-capita disappearance of freestone peaches in recent years has been below earlier years. Although fresh sales of freestone peaches have in recent years maintained their proportion of the crop, the reduced production, coupled with increased population, has resulted in a significant decline of per-capita disappearance.

Exports.--As with the other deciduous fruits considered in this report, we now turn to a brief look at the situation in fresh exports. The five-year averages for freestone peaches are tabulated in the next table.

The trend in the exports of fresh freestone peaches has been irregular. Fresh freestone exports trended down until the middle 1940's. A resurgence occurred during the 1944-1948 period, but a decline set in during the next several years. In 1949-1953, with exports averaging at some 6,700 tons, the level is close to the broad average experienced in the prewar years as a whole. As for other fresh deciduous fruits, the much sought expansion of exports of fresh freestones still remains a goal rather than an achievement.

Freestone Peaches: United States Fresh Exports

Period	Fresh exports	Fresh exports as per cent of total fresh sales
	annual averages for five-year periods	
	1,000 tons	per cent
1924-1928	8.6	--a/
1929-1933	5.0	--
1934-1938	5.0	0.7
1939-1943	4.0	0.6
1944-1948	8.0	0.8
1949-1953	6.7	1.0

a/ Dashes indicate data not available.

Pears

Commercial production of pears is heavily concentrated on the West Coast. California, Washington, and Oregon each have certain distinguishing characteristics. Oregon's production includes a substantial proportion of "late" pears primarily destined for fresh market. Washington has primarily Bartletts used in canning as well as fresh shipments. California has some "late" pears but more Bartletts of which substantial quantities are shipped fresh, although a larger volume is canned.

Production.--To outline the longer term trends in production on an aggregate basis, five-year averages are considered in the next tabulation.

National production of pears has followed an upward trend during most of the past three decades. Yet, during the past five or six years, the trend has leveled out, with production during the 1950's so far being under that of the late 1940's. When we look at California production of pears, we also find an upward trend, but it rose even more sharply in recent years. As a general tendency, California production has grown more rapidly than that of the country at large. National production of pears recently has averaged about 60 per cent above the 1924 output while California's production of pears, during the past several years, averaged about 170 per cent above its 1924 level.

a/ Leaves indicate data not available.

Pears: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	509.5	185.0
1929-1933	588.9	229.0
1934-1938	682.9	230.2
1939-1943	683.9	247.4
1944-1948	749.1	300.4
1949-1953	736.5	353.4

Acreage.--To review the number of bearing acres of pears from which the production has been derived, the following five-year averages are noted:

Pears: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 bearing acres	
1924-1928	229.5	52.8
1929-1933	236.8	65.8
1934-1938	212.1	55.4
1939-1943	181.6	45.2
1944-1948	--a/	43.7
1949-1953	--	39.6

a/ Dashes indicate data not available.

California bearing acreage increased during the latter half of the 1920's and into the early years of the 1930's. After a peak in 1932, California bearing acreage followed a downward course so that, in the past several years, the state has had about 85 per cent of the 1924 bearing acreage.

National bearing acreage of pears increased only slightly from 1924 until the early 1930's, after which a downward trend set in and continued through the period for which data are available. The inference is made that national bearing acreage, as that in California, continued to decrease. Thus, in California, as well as the country at large, there are substantially fewer bearing acres producing pears than in former years. The same applies to nonbearing acreage, although, in California, there has developed a slight recovery during the past decade.

Yield.--The production capacity of pear trees, as measured by yield, has grown phenomenonly during the past three decades. The record is summarized by the five-year averages:

Pears: Yield per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	2.22	3.49
1929-1933	2.49	3.49
1934-1938	3.25	4.21
1939-1943	3.77	5.48
1944-1948	--a/	6.86
1949-1953	--	8.91

a/ Dashes indicate data not available.

Aside from the fact that California's yield has averaged higher than the nation's, the yield in California appears to have risen at a more rapid rate. It is the growth in yield which has accounted for the upward trend in production noted earlier. As may be seen from Figure 13, yield expansion has been sufficient to more than offset the declining bearing acreage. For recent years, the California yield averages nearly three times that of 1924.

Sales, Total and Fresh.--To trace the outline of developments in the farm sales of pears for fresh market compared with products primarily canning, the following five-year averages are presented:

collecting five-year averages are presented:

[illegible]--Trace the outline of development in this farm
region of Peora for those market-oriented products primarily commercial, the
[illegible] in Orchard, there has developed a slight recovery during the past
decade.

[illegible]--The production capacity of pear trees, as measured by yield, has
grown phenomenally during the past three decades. The record is summarized by
the five-year averages:

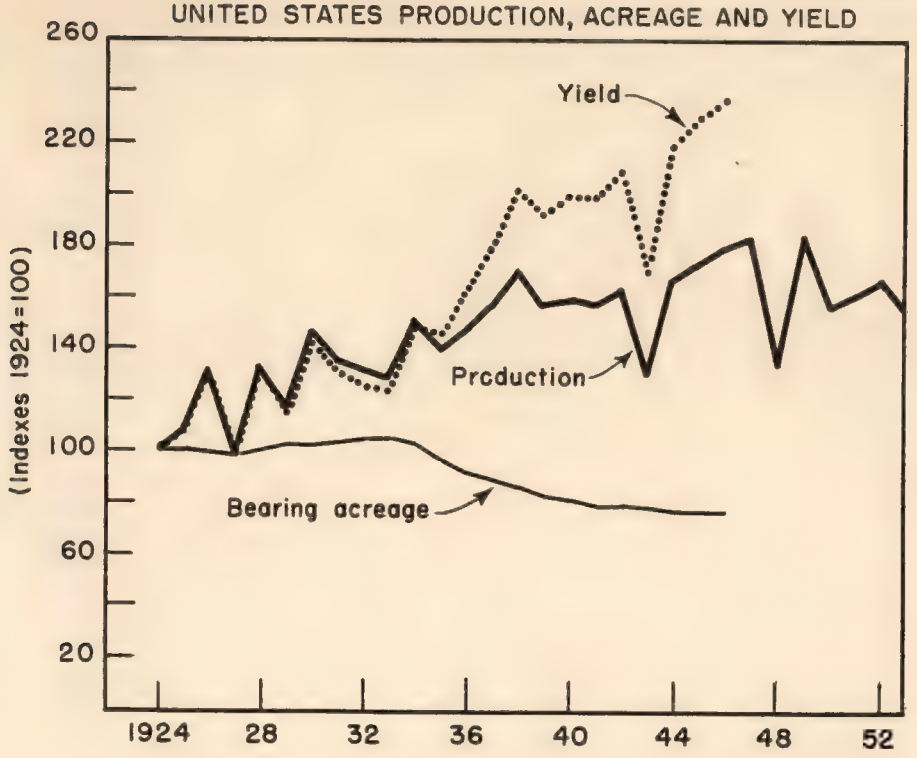
Peora: Yield per Bearing Tree

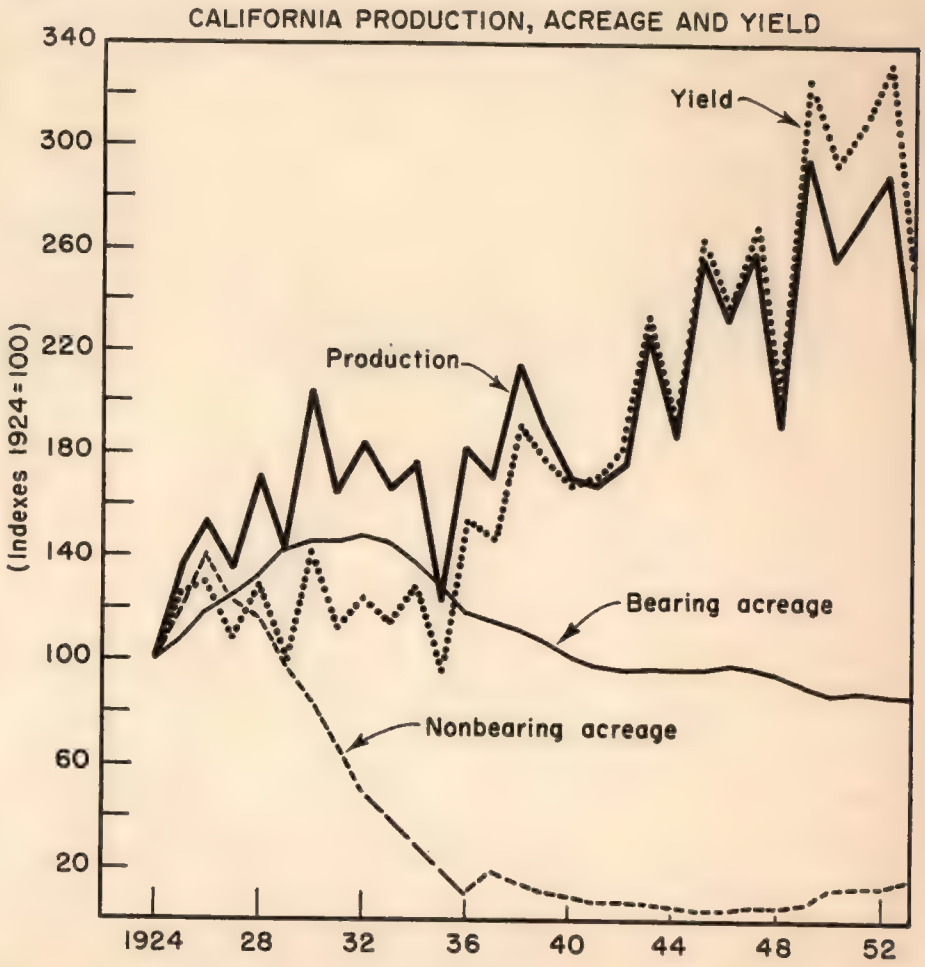
[illegible]	[illegible]	[illegible]
1925-1929	2.42	2.09
1920-1924	2.09	3.09
1915-1919	3.25	4.21
1910-1914	3.17	5.18
1905-1909	--1/	6.24
1900-1904	--	8.23

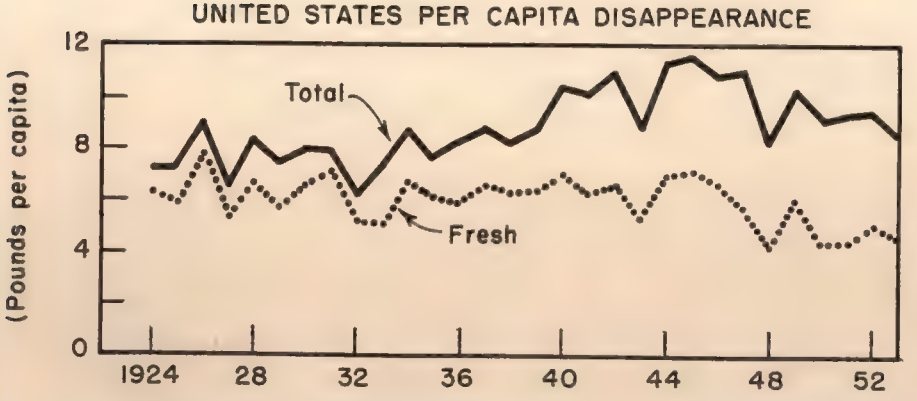
1/ Census indicates data not available.

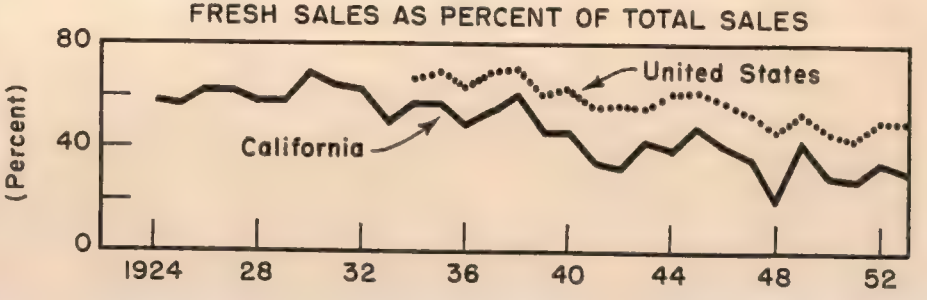
[illegible] the yield in Ontaverde appears to have risen at a more rapid rate
[illegible]. It is the growth in yield which has accounted for the upward trend in production
[illegible] as may be seen from Figure 13, yield expansion has been efficient
to more than offset the declining bearing acreage. Thus, [illegible] the

FIG. 13 PEARS; PRODUCTION, ACREAGE AND YIELD, SALES AND PER CAPITA DISAPPEARANCE









Pears: Sales, Total and Fresh

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1924-1928	429.7	--[a]	181.8	108.6
1929-1933	479.8	--	198.0	121.9
1934-1938	586.0	395.9	221.1	123.3
1939-1943	601.2	352.3	241.9	99.9
1944-1948	680.9	387.0	296.9	113.3
1949-1953	673.2	333.2	346.5	118.1

a/ Dashes indicate data not available.

From the national view, total farm sales of pears has trended up along with production, with a leveling out occurring in recent years. Still considering the country at large, farm sales of pears for fresh use have fluctuated over the periods considered, but in the past several years, total fresh sales have been under those of the previous years. When national fresh sales are related to the national total, we find a long-term tendency for the fresh outlet to comprise a decreasing proportion of the total.

When the California sales experience is examined, we find that total farm sales of pears have trended up sharply. But California sales of fresh pears have been irregular from period to period. Although under the average level experienced during the 1930's, California fresh sales since the beginning of the 1940's have trended up. Yet, when California sales of fresh pears are related to the state's total sales, there appears that for this state, as for the country, there has occurred a long-term downward trend of fresh sales as a proportion of the total pear market.

Grower Prices.--In view of the trends in production of pears and the differing roles of canning compared with fresh sales in the several major producing areas, grower prices are considered. For this purpose, California experience is compared with the national average by the following five-year averages:

2/ Parts industry data not available.

From the national view, there can be no doubt that the automobile, with a lasting and consuming interest, still commands the center of the stage, even after nearly 70 years. But in the past several years, total truck sales have been more than double passenger car sales. When medium and heavy trucks are added to the total, we find a long-term tendency for the truck market to overtake passenger car production.

Then the California sales experience is examined, we find that total truck sales have trended up sharply. But California sales of truck types have irregular from period to period. Although under the pressure of the Korean conflict during the 1950's, California truck sales ahead the beginning of the 1960's decade trend. Yet, when California sales of truck types are related to the state's total sales, there appears that for this state, as for the country, there has occurred a long-term downward trend of truck sales as a proportion of the total auto market.

Future Trends.--In view of the trends in production of parts and the driving roles of competing equipment with truck sales in the general motor vehicle industry, current trends are considered. For this purpose, California experience is compared with the national average by the following five-year averages:

Pears: Grower Prices

Period	United States	California
	annual averages for five-year periods; dollars per ton	
1924-1928	57.08	52.92
1929-1933	37.50	33.00
1934-1938	30.42	26.33
1939-1943	53.33	47.00
1944-1948	96.25	90.17
1949-1953	79.58	64.83

Grower prices of pears followed in part the general price swings experienced by most other deciduous fruits. Wide year-to-year changes were superimposed upon a sharp decline after 1929, with grower prices making no really substantial recovery until the 1940's and war years during which period the prices rose to unprecedented levels. But in 1948, even the wartime highs were exceeded only to drop very sharply in the next year and then to recover and continue to vary. In terms of cyclical and year-to-year movement, grower prices of pears in California have been very similar to national average grower prices for pears. The average prices for both the nation at large and California reflect a mixture of prices for fresh pears and pear products. But in California, as in Washington, the influence of the price for canning pears plays a significant role.

Per-Capita Disappearance, Total and Fresh.--Now, we turn to the trend developments in per-capita disappearance reflecting the interactions of growth in sales and population. The five-year averages computed for this purpose are given in the next tabulation.

After a fairly stable level of total per-capita disappearance of pears until 1933-34, there then developed an upward trend. This rise in total per-capita disappearance continued through most of the 1940's, then, because of the production recession in face of continued population growth, the per-capita total disappearance declined. It still averages above the experience prior to the 1940's, but the upward trend has broken at least temporarily.

Pears: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use	Products
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	7.7	6.4	1.3
1929-1933	7.2	5.9	1.3
1934-1938	8.4	6.3	2.1
1939-1943	10.0	6.3	3.7
1944-1948	10.6	6.2	4.4
1949-1953	9.4	5.0	4.4

When we look at the trend development in per-capita disappearance of fresh pears, we find the interesting case of a fairly stable per-capita rate through most of the 1940's. There were, of course, year-to-year variations, but they occurred around a level trend. Beginning with the late 1940's, the rate of per-capita disappearance of fresh pears receded; instead of fluctuating around an average level of somewhat in excess of six pounds, in recent years the per-capita rate has averaged about five pounds for fresh pears.

The per-capita disappearance of pear products, primarily canned pears, has trended up over the years so that, during the past decade, it has averaged about 3.4 times the rate of 20 years earlier. Even when the average experience of 1949-1953 is compared with that of 1944-1948, an interval during which the per-capita total and fresh disappearance rates declined, the per-capita rate for pear products held its level. It is clear that the drop in the per-capita disappearance of fresh pears is a recent development rather than reflecting a long-term one.

Exports.--In closing these paragraphs on pears, we turn to the situation in exports of fresh pears. The relevant five-year averages, to depict the general trend, are shown in the next tabulation.

Exports of fresh pears have fluctuated over the years. There was an upward trend from the middle 1920's through the late 1930's. But the war interrupted exports, and they have since failed to recover to their earlier levels. In terms

of tons, exports of fresh pears during the past five years have averaged only slightly in excess of half of the average level experienced 25 years ago. Another way of looking at the changed situation is to note that, during the latter half of the 1930's, fresh pear exports averaged near 15 per cent of total fresh disappearance compared with an average of about 5 per cent for recent years.

Pears: United States Fresh Exports

Period	Fresh exports	Fresh exports as per cent of total fresh sales
	annual averages for five-year periods	
	1,000 tons	per cent
1924-1928	32.0	--[a]
1929-1933	51.8	--
1934-1938	66.2	16.0
1939-1943	15.6	4.1
1944-1948	25.4	6.0
1949-1953	16.8	5.0

a/ Dashes indicate data not available.

Plums

Plums are mainly used fresh, although some are canned. The large bulk of commercially produced plums are grown in California. In terms of volume, plums rank after apples, apricots, grapes, freestone peaches, and pears when the national production of these fruits is considered. But when California production is examined, it is found that the tonnage of plums exceeds that of cherries, although plums rank after the other deciduous fruits mentioned here.

The trend in plum production since 1924-1928 is outlined by five-year averages in the next tabulation.

Plum production generally followed a rising trend that reached its high in the middle 1940's. Since then, although annual fluctuations have been wide, production has averaged about the same as the first half of the 1940's. To account for the trend in production, we first look at bearing acreage and then yield.

a/ Number in this area not available.

Plums: Production

Period	United States	California
	annual averages for five-year periods; 1,000 tons	
1924-1928	64.7	59.0
1929-1933	68.4	62.4
1934-1938	65.1	60.6
1939-1943	76.4	71.8
1944-1948	87.2	80.8
1949-1953	87.6	80.6

Bearing Acreage.--Plum bearing acreage trended upward from 1924 until near the end of the 1930's when a declining trend began. The reduction in bearing acreage continued until the early 1940's and then began to recover. But partial recovery ceased by 1948 and since then, the trend again has been down. As a result, the average levels of bearing acreage in 1944-1948 and 1949-1953 have been about equivalent, and each only slightly above the low of 1939-1943.

Plums: Bearing Acreage

Period	United States	California
	annual averages for five-year periods; 1,000 bearing acres	
1924-1928	33.1	28.3
1929-1933	34.1	30.2
1934-1938	29.4	25.7
1939-1943	24.9	22.0
1944-1948	--[a/]	23.5
1949-1953	--	23.4

a/ Dashes indicate data not available.

Nonbearing acreage of plum trees has also followed an irregular trend, declining until the late 1930's, then rising and declining again. During the

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

the end of the 1930's when a declining trend began. The variation in bearing centers continued until the early 1940's and then began to recover. Declining total resources caused by logging and mine slums, the trend again has been down. As a result, the average levels of bearing coverage in 1941-1943 and 1949-1951 have been about comparable, and each only slightly above the low of 1917-1919.

[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]

a/ Trends indicate data not available.

Concerning sources of plan tax data utilized as fundamental trend, declining usual rate 1950's, then riotous and destructive scenes. Having the

past five or six years, nonbearing acreage has been fairly stable at a level of about 45 per cent of that standing in 1924.

Yield.--To account for the production trend, in view of the bearing acreage of plums, we must look at the average yield experience.

Plums: Yield per Bearing Acre

Period	United States	California
	annual averages for five-year periods; tons per bearing acre	
1924-1928	1.95	2.07
1929-1933	2.01	2.07
1934-1938	2.22	2.37
1939-1943	3.08	3.27
1944-1948	--a/	3.47
1949-1953	--	3.45

a/ Dashes indicate data not available.

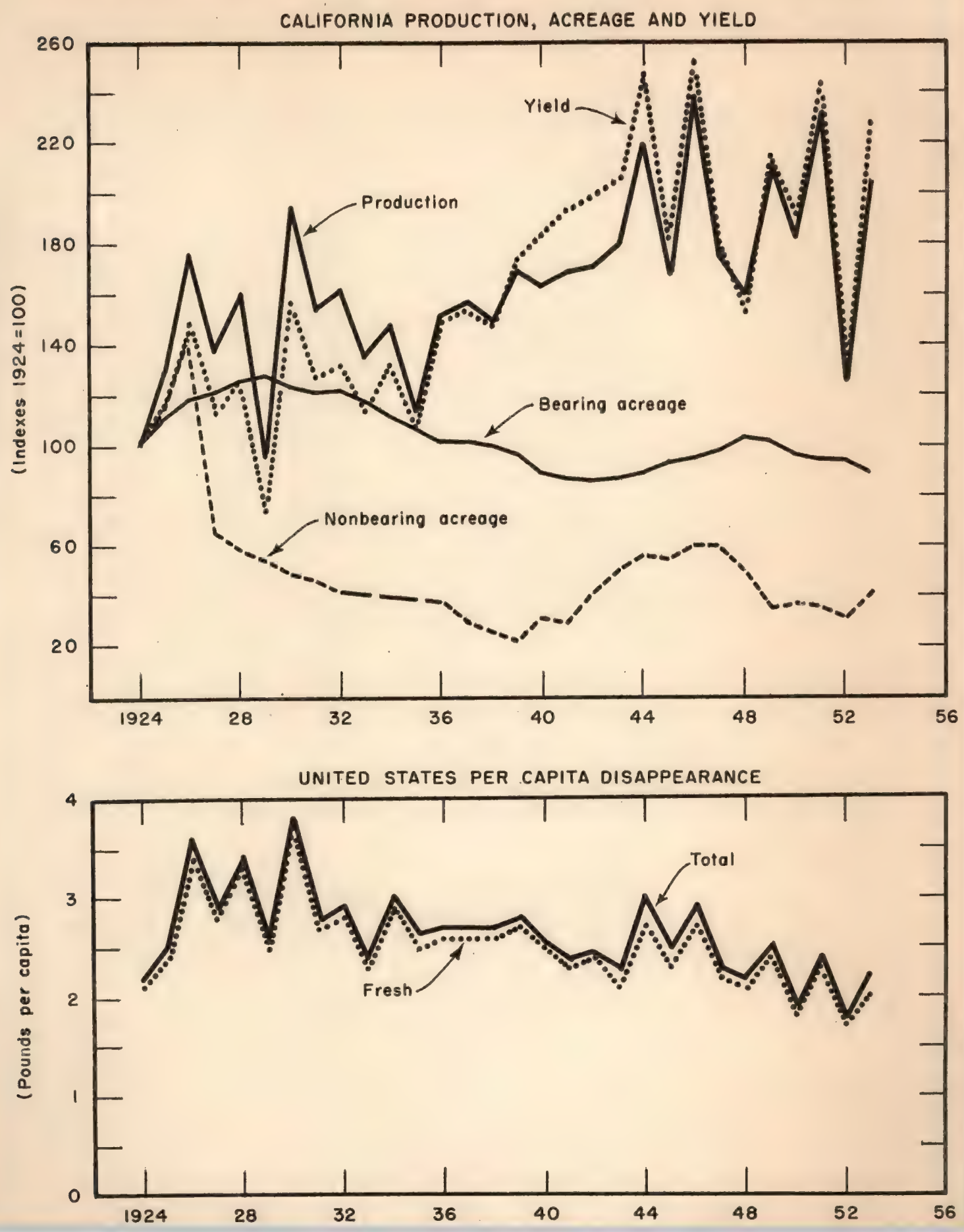
The data clearly emphasize that the upward trend in production reflects yield experience. After a fairly stable yield trend for the 1924-1933 period, an upward trend developed. The rising trend continued through most of the 1940's. Recognizing the wide year-to-year swings in recent years, yield has averaged about the equivalent of that during 1944-1948. Thus, although the upward trend did not continue, average yield has just about been maintained in the sense that in recent years there has been a level trend around which the annual figures fluctuated.

The interaction of bearing acreage and yield, with the resulting production, are pictured in Figure 14. There may be noted how influence of yield has more than compensated for the acreage trend.

Sales, Total and Fresh.--To compare the trends in the farm sales of plums destined for the fresh market and total sales, five-year averages are used in the next tabulation.

The extent to which fresh sales of plums dominate total sales is reflected by the above data. Both have trended up through the middle 1940's and in

FIG. 14 PLUMS; PRODUCTION, ACREAGE AND YIELD AND PER CAPITA DISAPPEARANCE



recent years, national fresh sales have held up better than national total sales. In California, the total sales of plums also trended up until recent years and then receded as during 1949-1953. California fresh sales of plums behaved about the same as total sales.

Plums: Sales, Total and Fresh

Period	United States		California	
	Total sales	Fresh sales	Total sales	Fresh sales
	annual averages for five-year periods; 1,000 tons, fresh weight basis			
1924-1928	63.2	--a/	58.8	56.1
1929-1933	62.1	--	57.3	55.4
1934-1938	64.2	62.1	60.3	58.5
1939-1943	71.1	68.4	66.9	64.4
1944-1948	83.9	78.2	79.9	74.7
1949-1953	82.1	78.7	75.9	72.4

a/ Dashes indicate data not available.

Another way of considering developments in the sale of fresh plums is to review the proportion of total sales accounted for by fresh sales. Aside from year-to-year variations and wartime developments, the fresh proportion in California has averaged somewhat in excess of 95 per cent. And that proportion has been maintained well, except for 1953 when fresh sales dropped to slightly less than 80 per cent of total sales of California plums.

Grower Prices.--Prices received by growers for plums have experienced ups and downs as in other fruits. A high in 1929 was followed by a decline with a low reached in 1932. Then the price trended up, first slowly and then rapidly to a peak in 1943. After a decline the next year, an upward trend again developed and accelerated during the 1950's, although individual years show very strong upward and downward swings.

The five-year average prices smooth out the wide year-to-year swings and display the general trend. It may be noted that, compared with the other deciduous fruits, the grower prices of plums during the past several years have been considerably more favorable in a relative sense, that is, in relation to experience of earlier years.

[illegible] Sales, Total and Type[illegible]

[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

[illegible] Prorate [illegible] data not available.

[illegible] way of measuring development in the sale of fresh fruit is to [illegible] the proportion of total sales accounted for by fresh fruit. [illegible] year-to-year variations and various developments, the [illegible] observation in California has remained somewhat in excess of 5% per cent. And that proportion has [illegible] rising, except for 1929 when fresh sales dropped to scarcely [illegible] per cent of total sales of California plums.

Prices Prices.--Prices received by growers for plums have characterized the [illegible] as in other fruits. A high in 1929 was followed by a decline with a low recorded in 1932. Then the price trended up, fluctuated slightly and then rapidly to a peak in 1943. After a decline the next year, an upward trend again developed [illegible] during the 1940's, although individual years show very [illegible] and downward [illegible].

The five-year moving [illegible] smooth out the wide year-to-year swings and [illegible] the general trend. It may be noted that, compared with the other decades [illegible], the average prices of plums during the past several years have been considerably more favorable in a relative sense, that is, in relation to [illegible] of selling [illegible].

Plums: Grower Prices

Period	United States	California
	annual averages for five-year periods; dollars per ton	
1924-1928	68.38	71.94
1929-1933	52.40	54.42
1934-1938	46.12	47.12
1939-1943	83.72	84.92
1944-1948	138.20	139.80
1949-1953	163.40	163.20

Per-Capita Disappearance, Total and Fresh.--To examine the general trends in the per-capita disappearance of plums, the following five-year averages are indicated.

Plums: United States Per-Capita Disappearance, Total and Fresh

Period	Total (all uses)	Fresh use[a/]	Products
	annual averages for five-year periods; pounds per capita, fresh weight basis		
1924-1928	2.9	2.8	0.1
1929-1933	2.9	2.8	0.1
1934-1938	2.7	2.6	0.1
1939-1943	2.5	2.4	0.1
1944-1948	2.6	2.4	0.2
1949-1953	2.1	2.0	0.1

a/ Includes plums and prunes used fresh.

The trend of per-capita total disappearance of plums has generally trended down, with the decline being more marked during the past five years than

The trend of per-capita total disappearance of wines has generally trended down, with the decline being more marked during the past five years than

earlier. The per-capita disappearance of fresh plums (including prunes consumed fresh) has also trended down, the declining rate being just about equivalent to that for all plums. Thus, the per-capita disappearance of plums in products primarily canned has remained approximately level, the only major departure being the rise in the latter 1940's. From an over-all view, per-capita consumption rates of total plums or fresh plums have not kept pace with the nation's population and money income expansion.

Exports.--During the past decade and a half, exports of fresh plums have varied around 5,000 tons, with 4,500 tons in 1939-1943, 6,300 tons in 1944-1948, and 4,600 tons in 1943. In these more recent years, fresh plums exports have averaged about 4 per cent of total fresh sales, compared with a comparable average figure of about 10 to 12 per cent during the prewar years, 1934-1938.

LONG-RANGE DEMAND PROSPECTS FOR CALIFORNIA FRESH FRUITS

Population growth, levels of income and purchasing power, and consumer habits or tastes are the main forces in the long-range market outlook. In thinking about economic affairs, we have in the past tended to regard incomes as a factor subject to rather quick change, while population and consumer tastes, in contrast, were usually thought of as slow-moving variables. But in recent years, population growth is becoming almost as rapidly moving a variable as income and consumer tastes. Within the past two decades, we have alternatively experienced the smallest and then the largest additions to our population that have been known in the modern history of this country, and this has been accompanied by a considerable shifting about regionally. Within the same period, consumer behavior with respect to selection of foods has also undergone substantial change.

The combination of these forces has produced a far more favorable market for California fresh fruit than would have been estimated from the perspective of twenty years ago. From the perspective of 1955, long-range demand for California fruits, in total though perhaps not equally so for each and every one, looks favorable. Yet, it must be acknowledged that we cannot conclusively say that we are in better position today to know the future than we were twenty years ago. Nevertheless, our economy has grown larger, we have had more experience in trying to stabilize and control it, and we have more knowledge about how it has performed than ever before. Consequently, even though no certain predictions can be made, it should be worth while to discuss some of the important influences and forces that will be prominent in the years to come. Three subjects--population, consumer income, and consumer behavior with respect to fresh fruits--will be the basis of such a discussion in the following pages.

The Population--How Many Consumers?--Most everyone now shares a population outlook that is entirely different from that prevailing in the latter 1920's and the 1930's. Then, with birth rates falling as they had for two centuries at least, it was generally believed that a peak in our national population would be reached at around 1975 or 1980. At this expected peak, it appeared that we would have 165 to 170 million people and that thereafter, the total would level off or possibly decline. With this in prospect, the business outlook tended generally toward pessimism; agricultural producers were apprehensive that food supplies would regularly exceed demand and that glutted markets had come to stay. But

quite unexpectedly, the long downward trend in birth rates was reversed; shortly after 1940, a marked upward turn in births set in. In the emergency atmosphere of war and postwar adjustment, this new development was little noticed until toward the end of the decade. In recent years, when this upward trend was sustained, many have come to the view that a new and radically different population prospect is emerging. Concurrently, many have come to the conclusion that the needs of a constantly and rapidly expanding population can be counted upon to provide a firm foundation of high-level prosperity. Is this optimism any better justified than the earlier pessimism? Are we in a new population epoch that will be sustained? Let us examine the evidence.

In earlier stages of civilization, the size of any national population, aside from mass migrations, was controlled by the death rate. Birth rates were apparently high and fairly stable, and whether the numbers of people waxed or waned depended on deaths, with the irregular occurrences of plagues and pestilences causing the many abrupt changes that are known to have occurred. In modern civilizations, these population forces have been reversed. Death rates are remarkably stable and, save for minor temporary exceptions, have followed a gradual downward trend. In our own national history, immigration was, of course, the major force behind population change until recent decades. And, although our recent birth rate experience with its resulting population effect is widely known and may not accordingly seem to justify comment, we must examine further into the circumstances before reaching any judgment as to whether it is a temporary or permanent situation.

The abrupt upward turn in the number of births and in the birth rate after 1940 as depicted in the accompanying chart (Figure 17) resulted from two factors: (1) a higher marriage rate, particularly at earlier ages, and (2) earlier bearing of children within the marriage span (see Figures 15 and 16). The combined effect of these two forces was the yield of a large crop of babies. Women in the age group 15-19 years in 1952 had produced 44 per cent more children than had their counterpart age group in 1940. Similarly, the contrast for the age group 20-24 years was 63 per cent more children and for the age group 25-29, 40 per cent more. Women of the age group 30-34 in 1952, most of whom had begun their child-bearing around 1940, had borne 20 per cent more children. In the older age categories, the bases of the birth comparisons begin to shift back into the 1930's as against the 1920's; hence, even though these generations of 1952 had borne fewer children than had their counterparts of 1940, all that this indicates is that the birth rate was lower in the 1930's than in the 1920's.

FIG. 15 MARRIAGE RATE IN 1953 COMPARED TO 1940

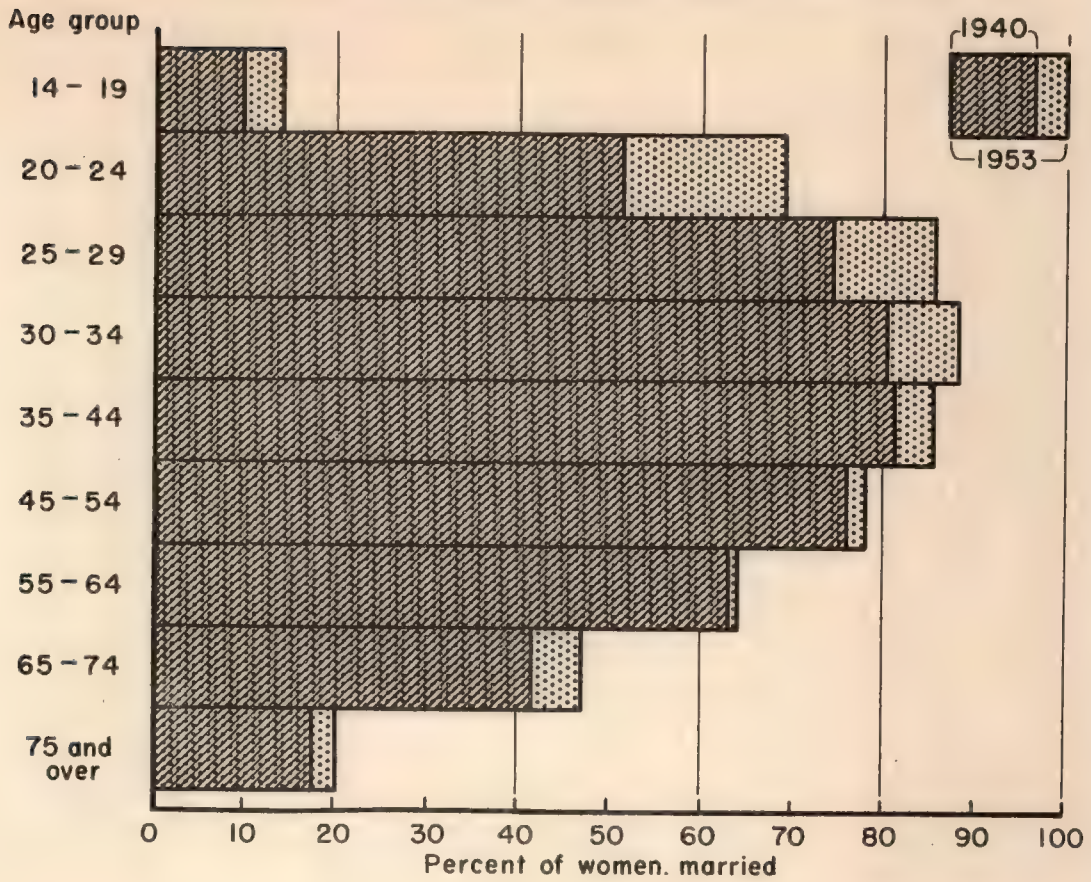


FIG. 16 BIRTHS PER 1000 WOMEN IN 1952 COMPARED TO 1940, BY AGE GROUPS

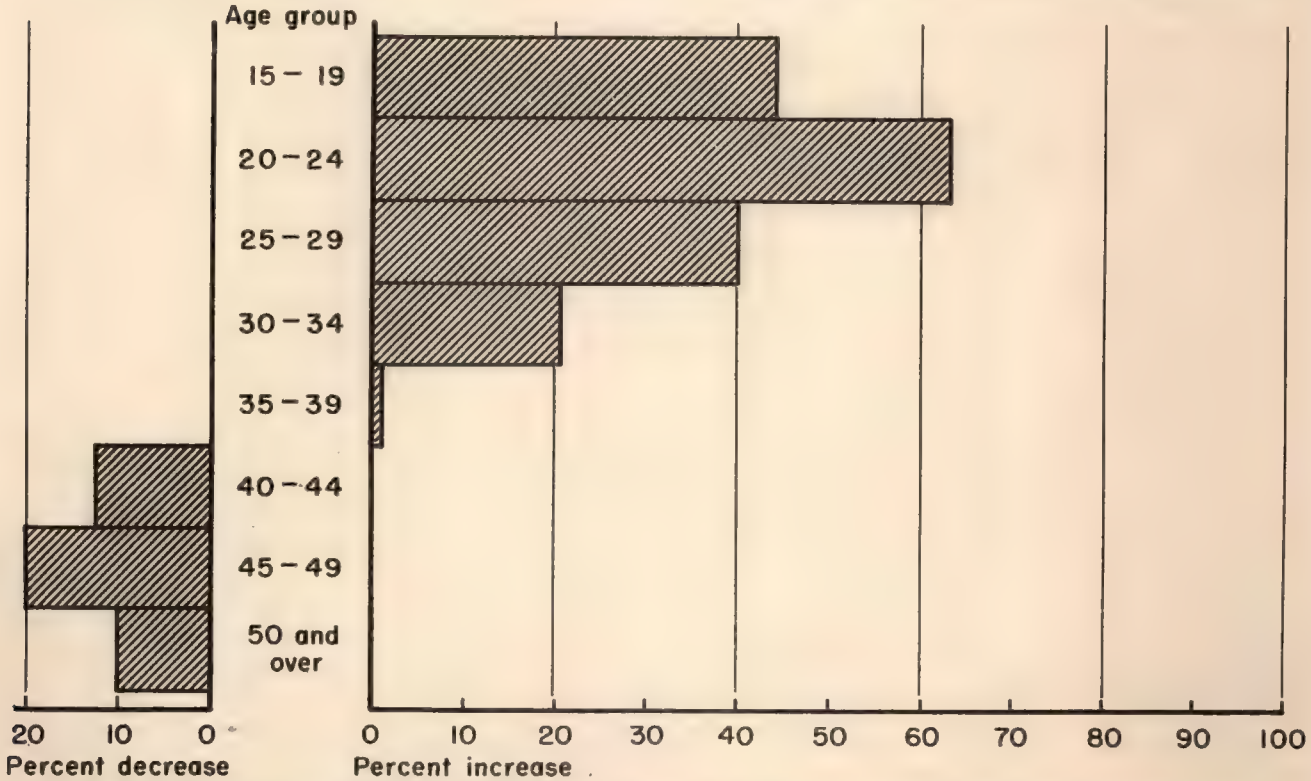


FIG. 17 NUMBER OF BIRTHS AND BIRTH RATE 1910-50 AND PROJECTIONS TO 1975

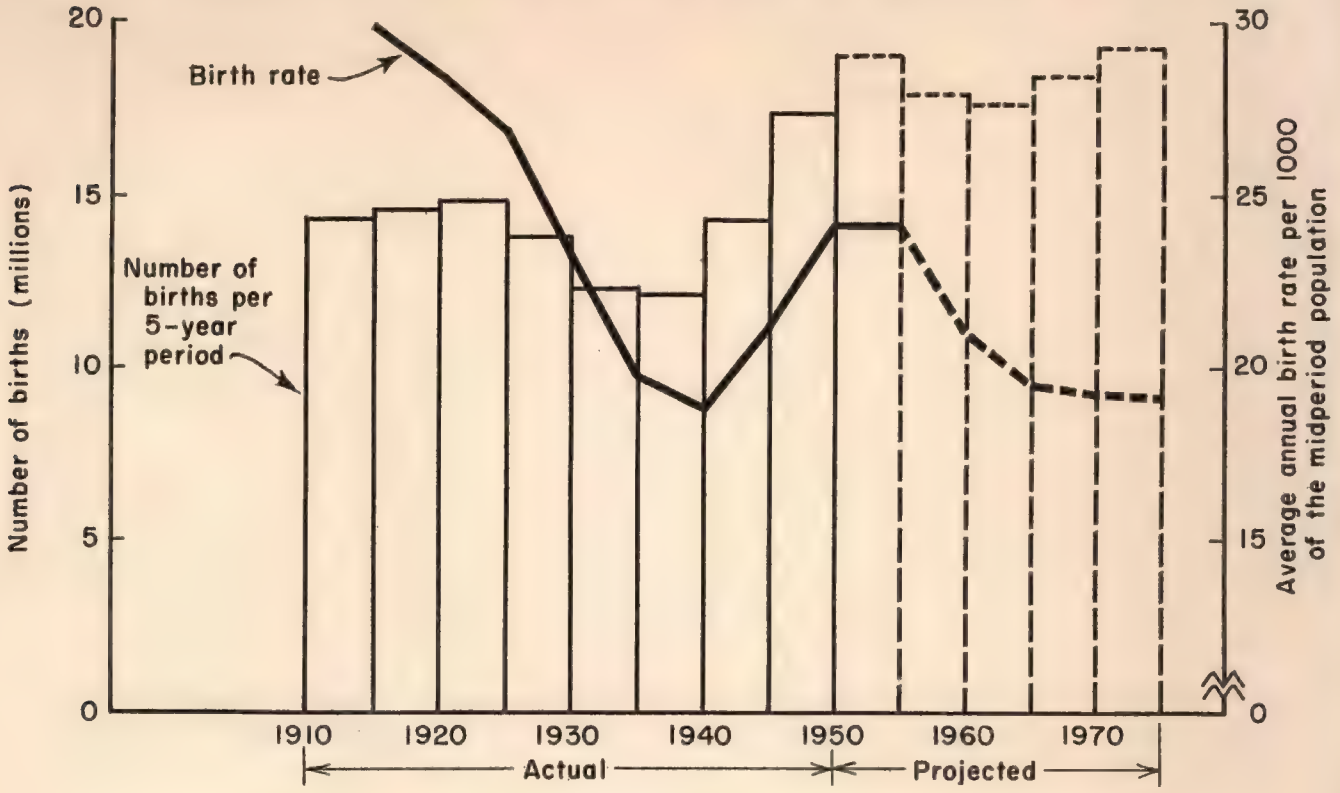
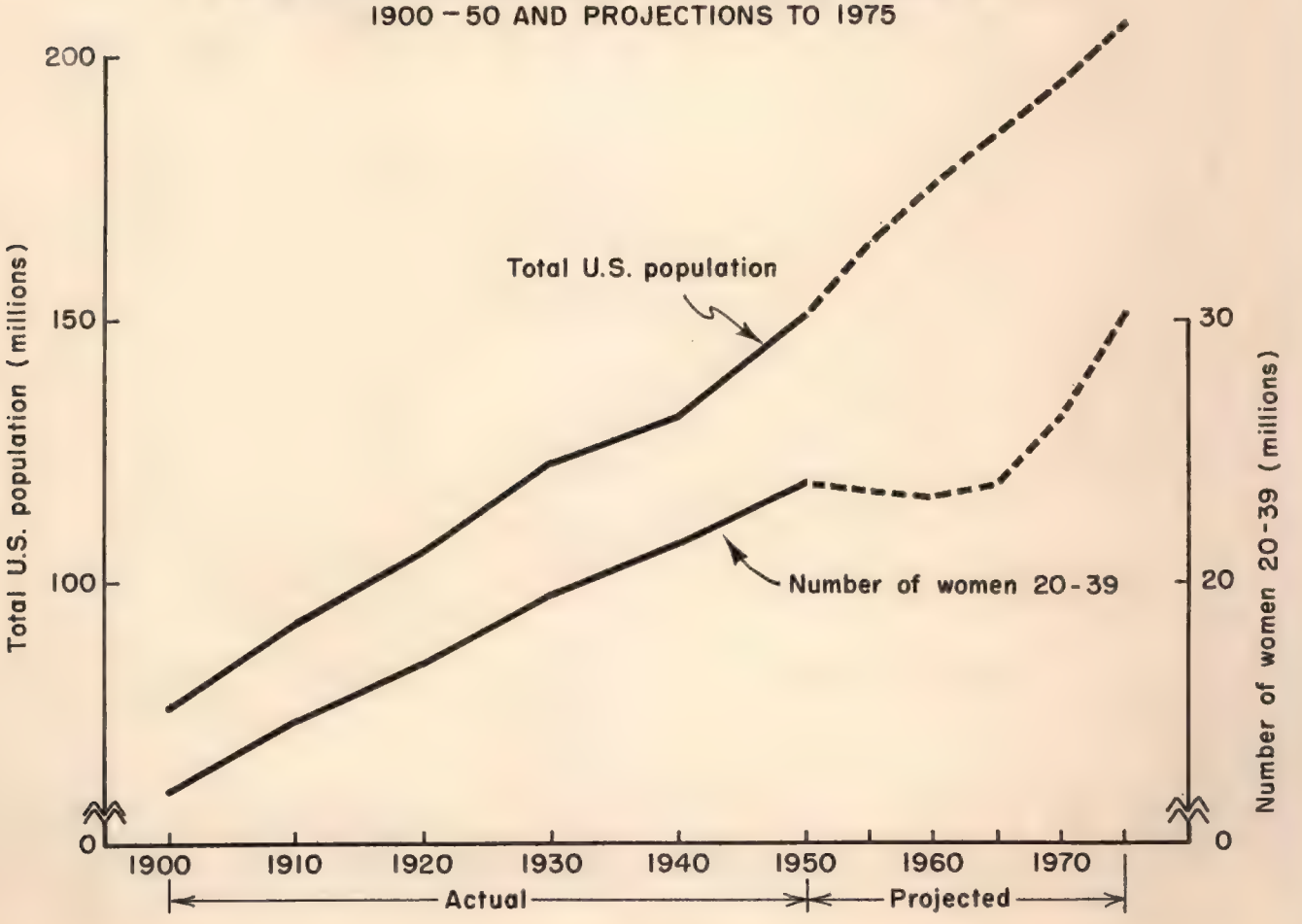


FIG. 18 TOTAL POPULATION AND NUMBER OF WOMEN 20-39, 1900-50 AND PROJECTIONS TO 1975



Thus, the evidence available at present clearly indicates that there has been an extraordinarily early and thorough exploitation of the reproductive capacity of the population during the past 15 years. This, by itself, accounts for the sharp upward turn in births. But, by itself, this is not evidence that there has been an upward revision in the prevailing concept of desirable size of family. It is quite true that the women in the age group 30-39 in 1952, who have had most of their children since 1940, had by 1952 borne almost enough children to replace their generation. If, in the remainder of the normal childbearing age range, this age group continues to bear additional children in accordance with the pattern of the past, then the total reproduction will greatly exceed replacement needs and will at the same time give evidence of at least a temporary upward revision in size of completed families. But, on the other hand, it is quite possible that having borne their children at an early age and early within their marriages, this generation of mothers may not follow out the full span of childbearing years as was characteristic of preceding generations. If the latter were to become the fact, the sharp upward thrust in births may eventually prove to be only a temporary acceleration due to a forward exploitation of reproductive potential and not a really abrupt break with past fertility trends. Even though the evidence now available suggests at least a slight upward revision in family size, it is not conclusive, and the evidence will not be at all final until the generation of mothers who began childbearing about 1940 have completed the normal childbearing span of years--that is, not until 1960.

In the meanwhile, barring catastrophic events more likely to be of man's making than of God's, we can anticipate a good deal about the national population between now and 1975. Most of those who will be parents between now and then are already born. In fact, from now until around 1965, most children will be born to parents whose birth occurred in the depression years. Since this was a decade of low birth rates, it follows that the limited childbearing population between now and 1965 will impose limits on the number of births even if family size does rise and remain high. The number of women in the 20-39 age group will remain approximately constant until after 1965, at which time the numerous births of 1945-55 will commence to enter that age category. There will be the potential for a really explosive population upward surge after 1965 should early marriage and large families be popular at that time.

Meanwhile, the projections of the national population in coming decades may be at different degrees of high, depending upon whether one assumes the continuance

for the sharp upward turn in births. But, by itself, this is not evidence that there has been an upward revision in the prevailing concept of desirable size of family. It is quite true that the women in the age group 30-39 in 1952, who have had most of their children since 1940, had by 1952 borne almost enough children to equal or their generation. If, in the remainder of the normal child-bearing age range, there are gross continues to born additional children in accordance with the pattern of the past, then the total reproduction will greatly exceed replacement needs and will at the same time give evidence of at least a temporary upward revision in size of completed families. But, on the other hand, it is quite possible that fewer born children at an early age and early widowhood under present mortalities, this gross ratio of births may not follow out the full span of child-bearing years as was characteristic of preceding generations. If the latter were to become the fact, the sharp upward thrust in births may eventually prove to be only a temporary acceleration due to a forward substitution of reproductive potential and not a really abrupt break with past fertility trends. Even though the evidence for available suggests at least a slight upward revision in family size, it is not conclusive, and the evidence will not be at hand until the reproduction of children who began childbearing about 1940 have completed the normal childbearing span of years--that is, not until 1965.

In the meantime, barring unforeseen events not a likely to be of major value then of today, we can anticipate a good deal about the national population between now and 1965. Most of those who will be parents between now and then are already born. In fact, then men until around 1960, most children will be born to women whose birth occurred in the depression years. Since then the trends of birth rates, it follows that the limited childbearing population between now and 1965 will impose limits on the number of births even if family size does not increase. The number of women in the 20-39 age group will remain approximately constant until after 1965, at which time the numerous births of 1940-45 will commence to enter that age category. There will be the potential for a large fluctuation in number at that time.

be at higher or lower levels of birth, depending upon whether one assumes the continuance

of recent birth rates or a gradual return to the prewar level, or an even more extreme assumption--that births might drop low enough to fit the long-time prewar trend line (refer to Figure 17). Since there is little to govern one in which assumption to choose, we have selected one that seems to be "reasonable," that is, that the birth rate will gradually decline from its present high level to about the 1940 level between now and 1975. On this assumption, the Census Bureau has prepared the projections of births and of total population that are depicted in Figures 17 and 18.

Even under this intermediate (and perhaps conservative) assumption, the number of births will be high and the population growth will be rapid. In the first half of the century, this nation's population doubled, which was a rapid rate in percentage terms, but it meant 75 million additional people in a relatively unoccupied country. In comparison, the projection above described would mean a 37 per cent growth between 1950 and 1975, but the projected increase in numbers within the quarter century is 56 million, and these to be absorbed in a now much more occupied country.

Regional Population Changes.--Californians, more than anyone else, have cause to be conscious of the shifting about of people within the national boundaries. World War II was the initiating force for much of the change that occurred during 1940-50 (see Figure 19). But it is equally significant that since 1950, regional shifting of population has continued, following much the same pattern and at much the same rate as in the prior decade. In the West, Oregon and Washington have declined in rate of growth, California has slacked off some in percentage terms although not in real numbers, while in percentage terms, Nevada and Arizona have emerged as the fastest growing states in the region (see Figure 20).

The centers of population that are the foundation of California's fresh fruit markets will undoubtedly continue for some years to be in the Northeastern and Great Lakes states. Nonetheless, the sustained and rapid growth of the Southwestern and Intermountain states--and indeed of California too--represent expanding market opportunities.

Income and Purchasing Power.--The expanding demand for consumer goods of the past quarter century has been more than proportionate to population growth. Along with the growing numbers of consumers, the capacity to consume has also greatly risen. This is because our economy has grown more productive, thus generating the higher levels of incomes in the hands of consumers. Greater investment in capital goods, progress in technology, and a more highly skilled labor

FIG. 19 PERCENT CHANGE IN TOTAL CIVILIAN POPULATION BY STATES : APR. 1, 1940 TO APR. 1, 1950

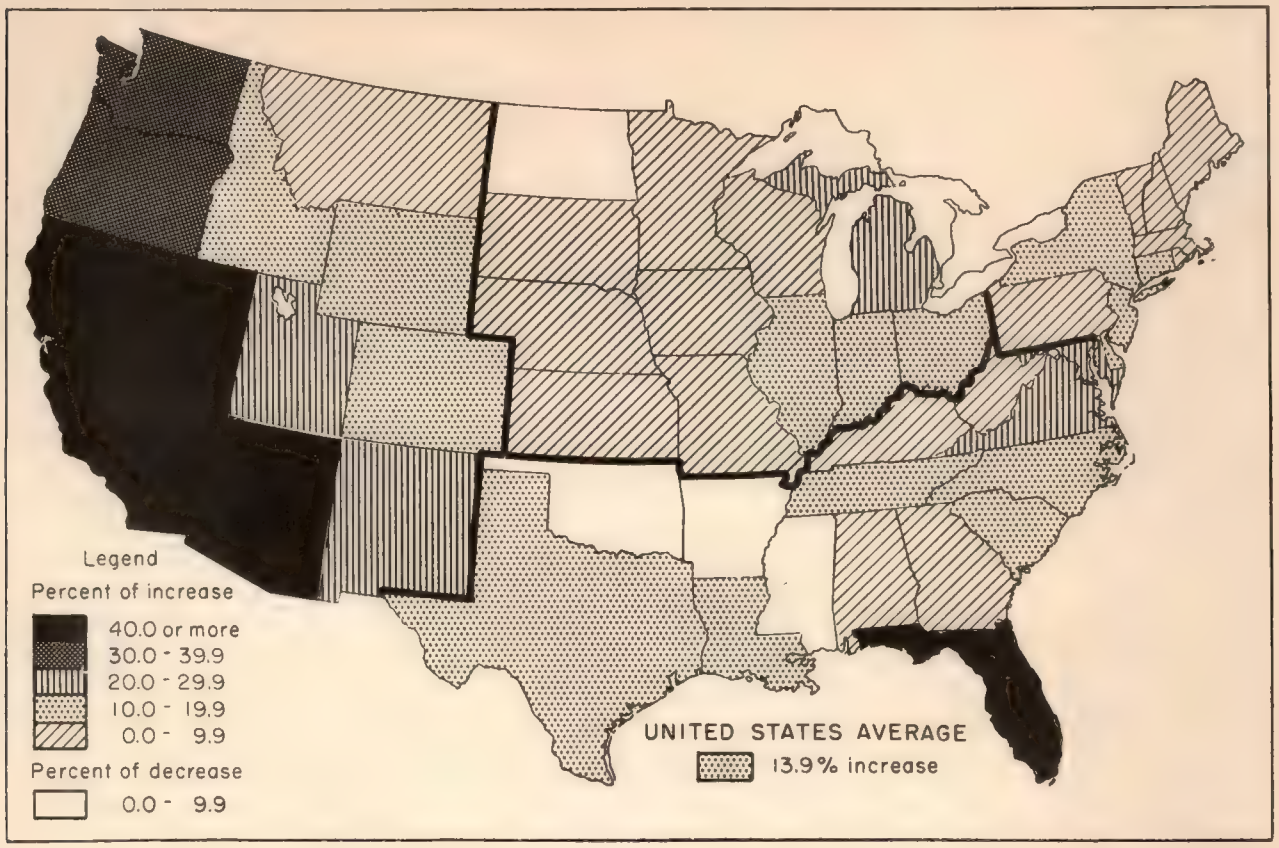
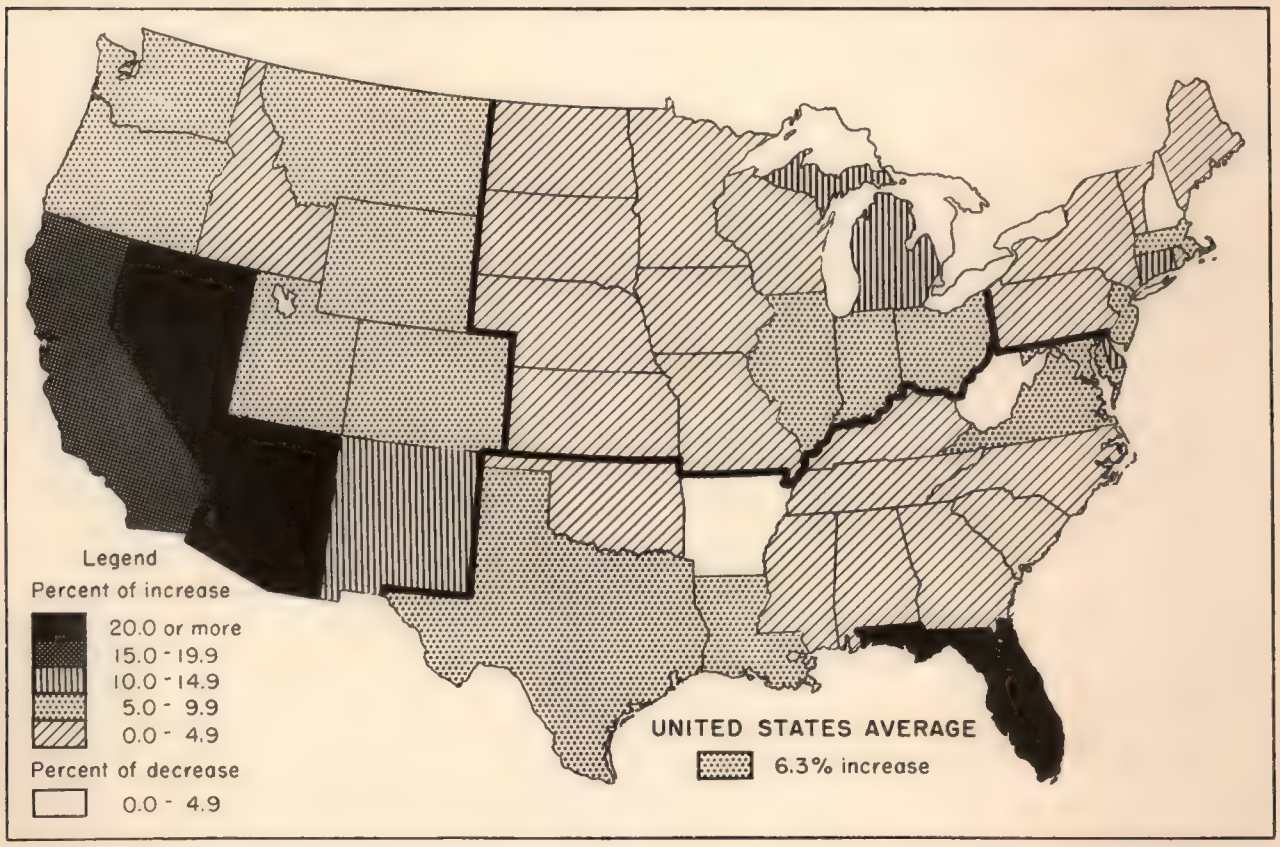


FIG. 20 PERCENT CHANGE IN TOTAL CIVILIAN POPULATION BY STATES : APR. 1, 1950 TO JULY 1, 1954



force are all important factors which, combined with relatively full employment in recent years, have had their influence in our enhanced ability to produce and consume. Moreover, the prospects are favorable to a continuation of this expansion in the next two decades.

From 1929 to the present, our economy has withstood a major depression and a major war as well as minor recessions and the Korean conflict. These jolts undoubtedly seemed severe when they were experienced, but a look back over the record reveals that they were temporary deviations from a relatively steady upward trend. The gross national product, that is, all the goods and services produced by the United States economy, increased from $104 billion in 1929 to $365 billion in 1953 or by 3½ times. The physical output of the nation has not really expanded to such a large extent, however. The 1953 figure of $365 billion contains a substantial element of inflation because 1953 prices were about 65 per cent higher than those of 1929. When gross national product is expressed in terms of constant dollars, using the 1947 price level as a standard, the comparison becomes $149.3 billion for 1929 and $306.6 billion for 1953 or an increase over the period of 105 per cent. This addition to the nation's production is not merely a reflection of the larger population either. Even in per-capita terms, the real output of the United States has increased by almost three fifths from 1929 to 1953. As might be expected from this expansion of production, the real income of United States residents also rose during the period. The increase in per-capita real income before taxes was about 60 per cent, but higher taxes have whittled the increase down to 44 per cent (Figure 21).

Not only has the magnitude of the nation's output and income changed in the last 25 years, but the various elements that are combined in these totals have shifted in importance. For example, the distribution of income among the various regions of the country has altered. The West and Southeast have tended to improve their income positions relative to those of the more settled, industrial regions of the Northeast. For the most part, the ranking of the various regions with respect to their share in total income payments and also in per-capita income has not appreciably changed from 1929 to 1953. What did occur was a narrowing of the gap between the percentage shares of the lowest and highest ranking regions, and in this movement toward the national average some regions gained faster than others. The result is that shares of income, whether on a total or per-capita basis, are now distributed a little more evenly among the regions of the United States than they were in 1929.

One of the profound changes in our national economy over the past 25 years has been the increased role of government in economic affairs. We shall examine this change by viewing government activities in a number of ways. First, the government is a purchaser of goods and services produced by the economy. For example, it buys office supplies for its civilian departments and guns and uniforms for the military. Military purchases and other national defense needs are all made on behalf of national security as are all purchases for foreign aid, whether military or economic. These national security purchases have expanded greatly in recent years. In 1929, government purchases for all uses amounted to about 8 per cent of the total goods and services produced in the United States. Only one eighth of these purchases were for national security purposes. By 1953, total government purchases had risen to 23 per cent of the gross national product, but three fifths of this total was earmarked for national security needs (Figure 22). In other words, with government purchases considered as a proportion of all available goods and services, regular, civilian, nonsecurity purchases were 7 per cent in 1929 as against 9 per cent in 1953. Thus, purchases incurred in expansion of the civilian services of the government have not been greatly burdensome; the rapidly growing burden has been in relation to national defense.

The government is also a payer of income. It makes direct income payments to its own employees, both civilian and military, and it makes transfer payments by redistributing income from one sector of the economy to another. In the latter capacity, for example, it collects social security taxes and pays out old-age pensions. As a direct payer of its own employees, government contributed about 6 per cent of the national income in 1929, and about 11½ per cent, or almost twice as much, in 1953. During this same period, government transfer payments including veterans benefits and pensions rose from 2 to 5 per cent of personal income. So, whether one considers the government in its role of purchaser or payer, its increased influence in our present-day economy is unmistakably clear.

The term "fringe benefits" scarcely heard in 1929 is now an important part of our national vocabulary. The 1954 edition of National Income states it this way:

> "An additional element stands out in the change in the employee share of national income. This was the internal shift to a somewhat lower proportion of wages and salaries and a higher proportion in the form of supplements to wages and salaries. The latter were an inconsequential element in 1929, consisting chiefly of compensation for injuries.

One of the profound changes in our national economy over the past [illegible] years has been the increased role of government in economic affairs. We shall examine this change by viewing government activities in a number of ways. First, the government as a purchaser of goods and services produced by the economy. For example, it buys office supplies for its civilian departments and guns and uniforms for the military. Military purchases and other national defense items are all made on behalf of national security as are all purchases for foreign aid, whether military or economic. These national security purchases have expanded greatly in recent years. In 1929, government purchases for all uses amounted to about 8 per cent of the total goods and services produced in the United States. Only one eighth of these purchases were for national security purposes. By 1955, total government purchases had risen to 20 per cent of the gross national product, but three fourths of that total was accounted for national security needs (Figure 23). In other words, although government purchases were large as a proportion of all available goods and services, regular, civilian, non-security purchases were 7 per cent in 1929 as against 9 per cent in 1955. Thus, the rise in [illegible] of the civilian services of the government has not been greatly influenced by the [illegible] burden has been in relation to [illegible].

The government is also a source of income. It makes direct money payments to its employees, both civilian and military, and it makes transfer payments by redistributing income from one segment of the economy to another. In the latter capacity, for example, it collects social security taxes and pays old-age pensions. As a direct payer of its own employees, government contributed about 6 per cent of the national income in 1929, and about 11 per cent, or almost twice as much, in 1955. During this same period, government transfer payments including veterans' benefits and pensions rose from 2 to 5 per cent of personal income. So, whether one considers the government in its role of purchaser or payer, its increased influence in our present-day economy is unmistakably clear.

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FIG. 21 PER CAPITA DISPOSABLE PERSONAL INCOME
1929-1953

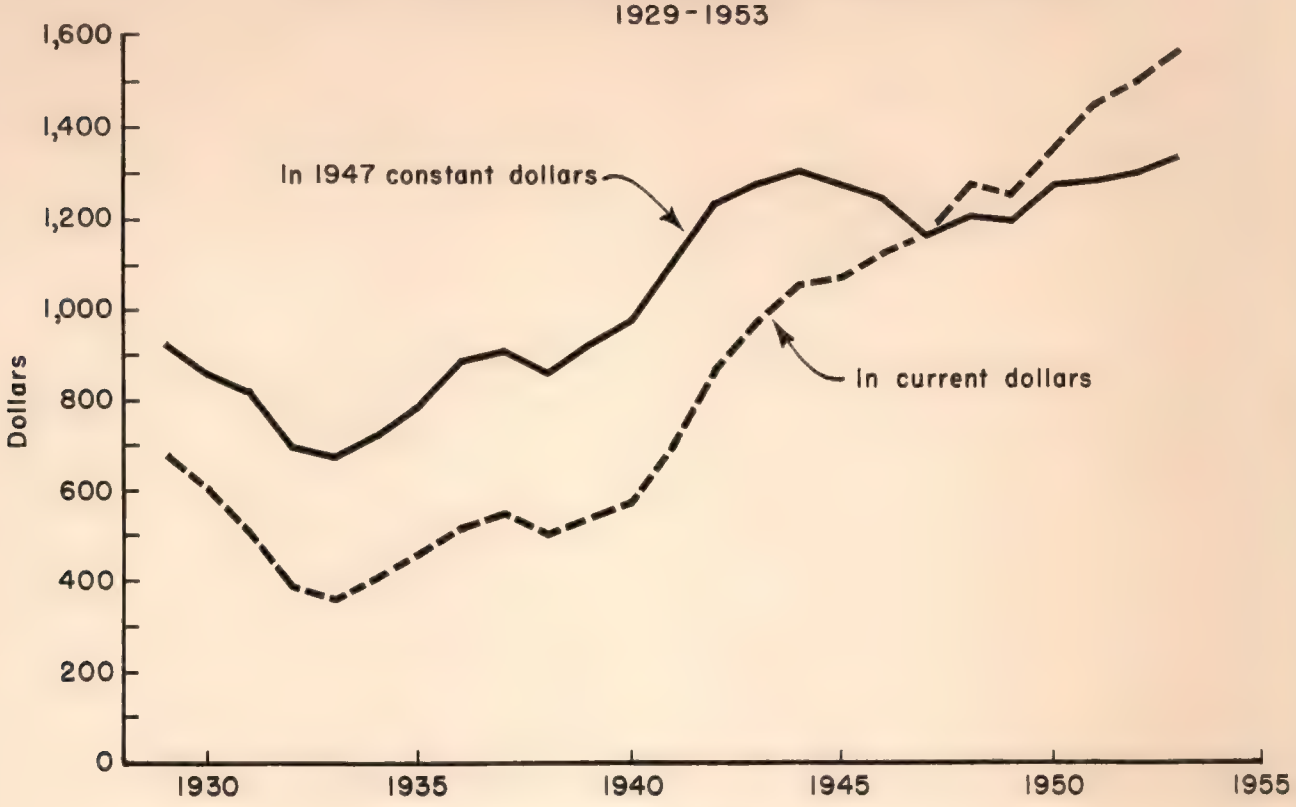
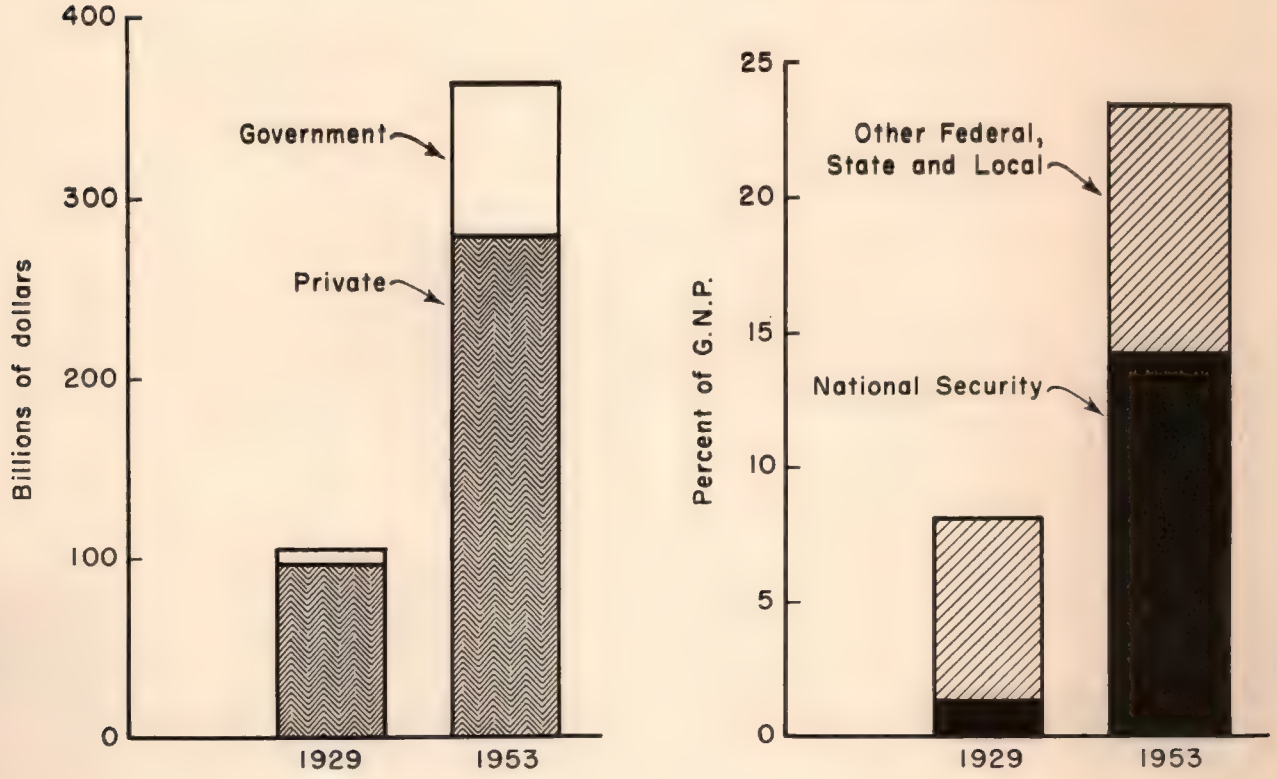


FIG. 22

GOVERNMENT PURCHASES amounted to 23% of the Gross National Product in 1953 as contrasted with 8% in 1929 ..... with the bulk of the increase in the government proportion going for defense purposes.



> Their growth to significant proportions--3½ per cent of national income in 1953--stems from the creation and expansion of the various social insurance programs, and from the marked growth in recent years of private pension, health and welfare funds."1/

Government benefits of this type have also greatly increased in the last 25 years. In 1929, veterans' pensions and retirement payments to government employees were almost the only important government contributions in this field. By 1953, not only were these two categories much larger, but new ones were added such as veterans' benefits, old age and survivors' insurance, and unemployment compensation payments.

What significance do these changes have for the future? It can be argued that a trend toward a more equitable distribution of income among the various regions of the United States is a healthy thing for the economy. Certainly the enlarged influence of government and the increased importance of social insurance and similar benefits have the effect of placing props under the flow of purchasing power to consumers. In times of recession or readjustment, these influences tend to help stabilize the economy and put a break on the disastrous downward spiral reminiscent of the early thirties. There is no indication that the American people will desire less of these social benefits in the future. On the contrary, they are likely to demand more--witness the growth of private health insurance plans in very recent years. In a similar vein, it is difficult to visualize the federal government shrinking back to anything resembling its 1929 importance. It is mainly through the national defense establishment that it is now affecting the economy, and defense needs are not expected to decrease in the foreseeable future. Thus, it seems reasonable to anticipate high government expenditures for at least the next few decades.

Several public and private agencies have made long-range estimates of the development of the American economy. These estimates, though different in particulars, agree that the future poses a great potential for growth (Figure 23).

The President's Materials Policy Commission, for example, forecast a 100-per cent rise in production from 1950 to 1975 in these terms:

> "If we assume for the moment a favorable set of materials supply conditions, the size of our national output by 1975 will depend mainly upon the size of total population and working force, the number of hours worked per week, the accumulation of capital that has by then occurred,

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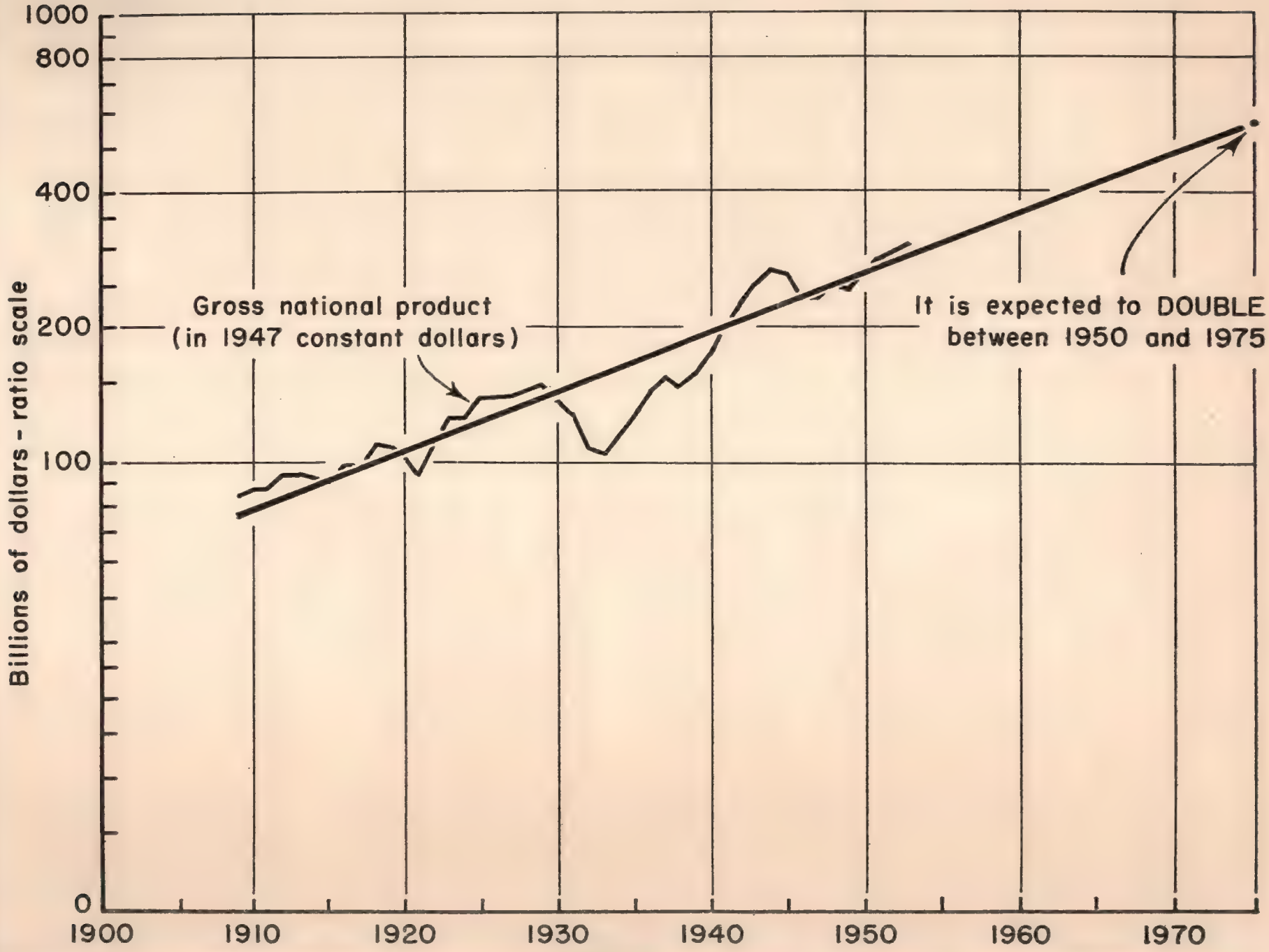
1/ U. S. Office of Business Economics, National Income, 1954 Edition (Washington: Govt. Print. Off., 1954).

FIG. 23 GROSS NATIONAL PRODUCT - LONG RUN TREND



> and upon the rise in man-hour productivity. Taking these various factors into account, this Commission believes it is reasonable to anticipate a rate of growth for the United States economy in the future roughly equal to the past rate of growth, or about 3 per cent a year. This means that by 1975 total national output (the total of all our goods and services, known as gross national product) would be approximately double that of 1950. . . .
>
> "Depressions and recessions, historically viewed, become smaller episodes in a longer and more heroic tale. There is no reason to assume that a world which has been growing by leaps and bounds for many generations will suddenly become static in this generation."1/

With the prospect of more than 200 million persons in the United States by 1975, this forecast implies a gross national product of about $2,650 per capita, which is 52 per cent higher than the 1950 figure. This can be considered an indication of the nation's increasing economic strength, but it does not provide an estimate of consumer-purchasing power. To obtain this, we must examine another measure, namely, per-capita disposable income.

During the past 30 years, per-capita disposable income has averaged about 75 per cent of per-capita gross national product. However, this figure is affected by the relatively lower tax rates of the 1930's, which we are unlikely to experience again in the foreseeable future. In view of the high defense expenditures now incurred by the federal government and their probable continuance for the next few decades, it seems reasonable to expect a corresponding maintenance of present high taxes. Thus, the 75 per cent of gross national product left in the hands of consumers for their disposal seems a little too generous. In fact, during the last five years, this proportion has averaged only 71 per cent, due to the higher taxes necessary to support the defense establishment. Assuming no tax increases but only a maintenance of the present structure in 1975, per-capita disposable income should be about 48 per cent higher in 1975 than it was in 1950, or 41 per cent higher than the level of 1953.

Elements in Consumer Response to Fresh Deciduous Fruits.--A growing population with rising incomes strongly implies the prospect of vigorous markets for consumer goods in the years to come. How much significance is there in such prospects for food demand, and particularly for fresh deciduous fruits?

We know generally that when people in low-income categories obtain an increase in income, they may spend as much as one half of their additional income

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1/ U. S. President's Materials Policy Commission, Resources for Freedom, Chapter 2 (Washington: Govt. Print. Off.), vol. 1, pp. 6-7.

[illegible] [illegible] [illegible] [

on food. But in the higher income categories, an increase in income has much less effect on food demand--perhaps no more than 10 per cent of increased incomes in these categories is spent for food. It is generally accepted in the United States--all food commodities and all income groups combined--that the additional outlays for food which accompany increases in income are in the vicinity of 20 to 25 per cent of the income increase. That is to say, in other words, that for each dollar of additional disposable income in the hands of consumers, 20 to 25 cents will be spent for more food. The income reaction is not the same for all food commodities--some will increase more than the over-all average, some less, and some may not increase at all. Moreover, as is logical to expect, when the general income position of the economy becomes ever more favorable, the proportion of additional income dollars spent on food will decline.

With the potentials of population growth and income rise that are now in prospect, it is expected that the demand for food by 1975 may very well be 50 per cent higher than in 1950. This results from an estimated population growth of 36 per cent between 1950 and 1975, accompanied by a 10-per cent increase in per-capita food demand, which is based on the expectation of higher incomes.

How much of this increase in total food demand can we expect to be channeled into fresh fruit consumption? This question is almost impossible to answer precisely. Demand for individual items tends to fluctuate much more from year to year than that of broad classes of items. Thus, though total food consumption--or possibly even total fruit consumption--may exhibit a fairly steady trend, there is much interchange within the group such as a substitution of margarine for butter, peaches for apples, etc. It may be helpful, nevertheless, to see how consumers have behaved in regard to fresh and processed fruits in the recent past. From this, we may be able to draw some indications about how they are likely to spend incomes in future years.

In the spring of 1948, the U. S. Department of Agriculture made a nationwide survey of the food consumption of urban families.[1/] It was found that fruit took 8 cents of the consumer's food dollar and 5 of these 8 cents were spent on non-citrus fruits. Of the total expenditure for fruits other than citrus, about 62

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1/ The discussion in this section is based on the results of this survey. These are contained in two publications of the U. S. Department of Agriculture, Agricultural Information Bulletin No. 132, Food Consumption of Urban Families in the United States, and Commodity Summary No. 9, Fruit Selections of City Families.

per cent was spent on fresh fruit, 26 per cent on canned fruit, 5 per cent on canned juices, and the remainder on frozen and dried products.

There were pronounced seasonal differences in the consumption of fruit. Fresh and processed fruit move in directly opposite seasonal patterns. The consumption of fresh fruit is at its seasonal peak in the summer when processed fruit is at its lowest point. Within the fresh fruit group, there are substantially different seasonal patterns, too. The use of citrus fruits--a winter crop in Florida and partly so in California--is heavily concentrated in winter and spring and is sharply curtailed in the summer and fall when noncitrus fruits are purchased in greater quantities.

There are differences in food consumption from one part of the country to another, but most of these are in foods other than fruit. There is, however, some indication that southern families consume less frozen and canned fruits and juices than those of other regions. To some extent, this is a reflection of the lower income level of the South.

Income has a very important influence in determining consumer choices among various foods. Obviously, persons with higher incomes can afford to buy more food than low-income groups. For example, the group of urban families in the nationwide survey with incomes between $1,000 and $2,000 spent $17 a week for food in the spring of 1948 compared with $31 by the group with incomes between $5,000 and $7,500.

The increase in food outlays by higher income groups tends to be in the form of higher quality, higher priced items, more processed foods, and more eating away from home in restaurants. All of this indicates that the food purchases of high-income groups differ from those in low-income groups not so much by an increase in quantity but rather by a different selection of foods.

Among the food commodities to which consumers respond most readily, if they have the incomes, are frozen and fresh fruits. The 1948 survey indicated that the quantity of these items consumed in the home can increase as much as 3 per cent with 10 per cent higher incomes. Dried fruits, on the other hand, tend to be less important to the higher income families and canned fruit consumption increases with income up to about $3,000 per year (1948 price level), beyond which point it tends to level off.

American families do not have rigid and fixed consumption habits and patterns. This lack of rigidity is perhaps one of the most outstanding and significant features of our economy. The great changes that have occurred in our manner of

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Among the food commodities to which consumers respond most readily, if they have the income, are frozen and fresh fruits. The 1954 survey indicated that the quantity of these items consumed in the home can increase as much as 3 cups each with 10 per cent higher income. Dried fruits, on the other hand, tend to increase with income up to about $3,500 per year (1948 price level), beyond which point it tends to level off.

Consumer families do not have rigid and fixed consumption habits and patterns. This lack of rigidity is perhaps one of the most outstanding and significant features of our economy. The great changes that have occurred in our pattern of

living within recent decades have had their impact on every phase of economic life. The changes in food needs and preferences are certainly not the least important of these impacts.

Where formerly our working force in many industries and occupations was engaged in energy-consuming physical labor, we now use machines that consume other forms of energy than food. In consequence, an increasingly large proportion of our occupations are sedentary.

Centrally heated offices, factories, and homes have meant that less energy is needed to maintain body temperatures. At the same time, people are apparently becoming more weight-conscious. All of these developments mean a decrease in the need for energy-rich foods.

Yet the capacity of the human stomach and the physiological appetite level remain much the same. We continue to consume about the same total poundage of food stuffs per capita as we did half a century ago. The adjustment that has taken place is to substitute foods that have appetite appeal and nutritional components other than carbohydrates for part of our previous energy-rich diets.

This shifting in the composition of the average diet is a gradual process likely to continue for many years to come. In addition to the factors that were mentioned above, a further influence in the same direction is the growing numbers and proportions of people in the older age categories. In coming years, it is expected that the number of persons aged 65 and over will increase almost twice as rapidly as the total population. This, of course, is in consequence of improvements in medical science that have increased survivals into the older age categories.

Decreased need of energy-rich diets by older people and by a population that has less arduous physical work to do is a matter that should have far-reaching significance for the fruit industries. Fruits are a very satisfactory substitute for foods that are high in carbohydrate. But the evidence considered earlier in this report does not indicate that deciduous fruits, particularly in fresh use, have fulfilled the role in this replacement process that might be expected. Perhaps this role is yet to come.

life. The change in food needs and preferences are surely not the least important of these impacts.

Since formerly our working force in many industries and occupations was engaged in energy-consuming physical labor, we now use machines that consume other forms of energy than food. In consequence, an increasingly large proportion of our consumptions are redundant.

To match the energy of the human organism and the physiological appetite level needed, when the case, to consume about the same total poundage of food stuffs per day as in the mid a century ago. The adjustment that has taken place is to substitute foods that have superfluous and unwholesome ingredients over those concocted for part of our previous energy-rich diets.

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Between this, he is yet to come.

TABLE I

United States Production, Bearing Acreage, and Yield Per Bearing Acre for Various Deciduous Fruits

Year	Apples a/ b/			Apricots			Cherries			Grapes		
	Commercial production	Bearing acres	Yield	Production	Bearing acres	Yield	Production	Bearing acres	Yield	Production	Bearing acres	Yield
	1	2	3	4	5	6	7	8	9	10	11	12
	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons
1924	3,146.2	2,409.5	1.31	136.0	65.2	2.09	79.3	71.9	1.10	1,774.2	643.6	2.76
1925	2,988.7	2,358.9	1.27	149.0	68.3	2.18	73.8	71.9	1.03	2,199.7	708.8	3.10
1926	4,503.1	2,301.9	1.96	173.0	74.0	2.34	107.5	72.4	1.49	2,383.7	753.8	3.16
1927	2,268.8	2,243.2	1.01	207.7	80.1	2.59	61.4	73.6	.83	2,591.7	774.4	3.35
1928	3,486.6	2,187.9	1.59	177.3	83.0 c/	2.14	93.7	75.0	1.25	2,635.0	777.4	3.41
1929	2,649.1	2,137.8	1.24	220.4	85.8	2.57	98.3	76.8	1.28	2,086.1	768.9	2.71
1930	3,071.1	2,113.7	1.45	198.4	85.4	2.32	122.4	82.8	1.48	2,457.5	748.1	3.28
1931	4,027.6	2,093.1	1.92	281.0	84.8	3.31	126.4	89.7	1.41	1,647.3	727.8	2.26
1932	2,878.6	2,071.8	1.39	272.0	84.8	3.21	144.6	95.8	1.51	2,232.6	713.9	3.13
1933	2,914.5	2,053.2	1.42	271.1	82.6	3.28	136.1	101.4	1.34	1,938.6	695.8	2.79
1934	2,544.1	2,025.0	1.26	153.7	81.9	1.88	137.5	105.5	1.30	1,957.6	684.8	2.86
1935	3,369.6	1,921.9	1.75	227.5	80.9	2.81	145.7	106.4	1.37	2,477.4	668.8	3.70
1936	2,352.6	1,815.7	1.30	257.0	79.8	3.22	123.5	106.7	1.16	1,897.4	650.9	2.92
1937	3,676.1	1,715.6	2.14	324.4	79.9	4.06	147.6	106.1	1.39	2,726.2	645.4	4.22
1938	2,537.2	1,627.9	1.56	185.4	78.6	2.36	144.2	105.8	1.36	2,671.2	638.9	4.18
1939	3,341.9	1,553.5	2.15	331.5	77.7	4.27	184.5	105.7	1.75	2,449.0	628.8	3.89
1940	2,674.5	1,532.4	1.75	127.1	75.5	1.68	172.8	105.5	1.64	2,466.4	624.5	3.95
1941	2,933.2	1,495.7	1.96	213.9	73.8	2.90	161.7	105.8	1.53	2,724.9	627.6	4.34
1942	3,041.0	1,470.9	2.07	228.1	72.7	3.14	196.5	105.6	1.86	2,395.5	627.7	3.82
1943	2,095.4	1,448.9	1.45	104.4	72.9	1.43	116.2	106.6	1.09	2,965.2	626.7	4.73
1944	2,910.4	1,436.1	2.03	351.8	72.7	4.84	195.5	106.9	1.83	2,695.8	625.4	4.31
1945	1,600.5	1,421.7	1.13	191.5	72.9	2.63	148.3	108.0	1.37	2,766.8	627.2	4.41
1946	2,853.6	1,409.0	2.03	338.7	73.4	4.61	228.4	108.8	2.10	3,137.3	627.3	5.00
1947	2,709.4			201.2			171.2			3,020.0		
1948	2,143.9			246.1			212.6			3,061.0		
1949	3,216.0			196.7			245.1			2,622.7		
1950	2,987.7			215.0			238.7			2,687.9		
1951	2,655.8			183.2			230.0			3,389.8		
1952	2,219.7			176.8			217.9			3,164.4		
1953	2,229.0			243.0			224.0			2,696.0		
1954 d/	2,472.3						191.8			2,692.0		

Table I continued.

Year	Freestone peaches[e/]			Pears			Plums		
	Production[b/]	Bearing acres	Yield	Production[b/]	Bearing acres	Yield	Production	Bearing acres	Yield
	13	14	15	16	17	18	19	20	21
	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons
1924	1,123.1	711.2	1.58	449.4	230.2	1.95	47.8	29.4	1.63
1925	874.4	694.0	1.26	484.1	230.7	2.10	57.7	32.2	1.79
1926	1,283.4	675.2	1.90	587.6	229.0	2.57	82.4	34.0	2.42
1927	730.4	659.7	1.11	438.4	227.9	1.92	61.9	34.6	1.79
1928	1,185.5	647.0	1.83	587.8	229.6	2.56	73.9	35.2	2.10
1929	908.6	633.0	1.44	521.4	233.9	2.23	44.4	35.5	1.25
1930	811.4	626.5	1.30	652.0	235.1	2.77	89.5	34.3	2.61
1931	1,471.3	619.7	2.37	606.7	236.5	2.57	72.1	33.8	2.13
1932	718.6	617.5	1.16	588.3	239.3	2.46	74.3	34.0	2.19
1933	756.4	611.8	1.24	576.2	239.2	2.41	61.5	32.9	1.87
1934	842.4	599.2	1.41	674.3	235.1	2.87	67.5	31.7	2.13
1935	1,042.5	587.2	1.78	622.6	220.5	2.82	53.7	30.2	1.78
1936	833.1	571.2	1.46	655.8	218.6	3.14	67.9	28.9	2.35
1937	1,071.1	556.5	1.92	701.1	201.5	3.48	71.1	28.5	2.49
1938	981.1	549.2	1.79	760.9	194.6	3.91	65.5	27.8	2.36
1939	1,169.3	544.0	2.15	702.7	188.1	3.74	76.6	26.8	2.86
1940	1,034.9	557.0	1.86	710.2	184.0	3.86	74.0	24.8	2.98
1941	1,476.7	576.4	2.56	699.1	180.6	3.87	76.9	24.3	3.16
1942	1,177.2	595.4	1.98	725.9	178.5	4.07	76.2	24.0	3.18
1943	676.2	609.8	1.11	581.7	176.6	3.29	78.5	24.5	3.20
1944	1,382.1	620.2	2.23	745.7	175.2	4.26	96.5	25.1	3.84
1945	1,435.5	629.6	2.28	780.5	174.4	4.48	72.7	26.3	2.76
1946	1,434.5	635.2	2.26	802.5	174.1	4.61	116.0	26.9	4.31
1947	1,321.2			817.2			79.2		
1948	954.7			599.6			71.8		
1949	1,082.1			817.6			98.7		
1950	743.0			703.5			84.1		
1951	938.0			720.7			101.8		
1952	1,042.4			742.7			60.8		
1953	1,004.4			697.9			92.4		
1954[d/]	1,007.0			718.9			73.0		

(Continued on next page.)

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Table I continued.

a/ Commercial production of apples for years prior to 1934 was determined by multiplying total production figures by .817.

b/ Bushels were converted to tons by multiplying by .024. One bushel = 48 pounds.

c/ Prior to 1929 bearing acreage of California apricots was assumed to be the same as that for the United States.

d/ 1954 figures are preliminary.

e/ Production of freestone peaches equals production of all peaches minus production of California clingstone peaches. Bearing acreage of freestone peaches equals bearing acreage of all peaches minus bearing acreage of California clingstone peaches.

Sources:

Cols. 1, 4, 7, 10, 13, 16, and 19: U. S. Bureau of Agricultural Economics, Fruits (Non-Citrus) Production, Farm Disposition, Value, and Utilization of Sales, 1924-1953.

Cols. 2, 5, 8, 11, 14, 17, and 20: U. S. Bureau of Agricultural Economics, Fruits and Nuts Bearing Acreage, 1924-1946.

Cols. 3, 6, 9, 12, 15, 18, and 21: Derived by dividing production columns by their respective bearing acreage columns.

TABLE II

California Production, Bearing Acreage, and Yield Per Bearing Acre for Various Deciduous Fruits

Year	Apples[a/b/]			Apricots			Cherries			Grapes		
	Commercial production	Bearing acres	Yield	Total production	Bearing acres	Yield	Total production	Bearing acres	Yield	Total production	Bearing acres	Yield
	1	2	3	4	5	6	7	8	9	10	11	12
	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons
1924	191.4	51.1	3.75	136.0	65.2	2.09	13.5	9.2	1.47	1,535.0	469.6	3.27
1925	129.4	52.3	2.47	149.0	68.3	2.18	12.0	9.4	1.28	2,050.0	527.3	3.89
1926	222.6	52.5	4.24	173.0	74.0	2.34	20.0	9.9	2.02	2,069.0	564.8	3.66
1927	160.4	51.9	3.09	206.0	80.1	2.57	12.0	10.8	1.11	2,406.0	579.0	4.16
1928	281.7	50.0	5.63	173.0	83.0	2.08	16.6	11.5	1.44	2,366.0	577.2	4.10
1929	169.4	47.9	3.54	212.0	82.8	2.56	16.3	12.0	1.36	1,827.0	565.7	3.23
1930	250.4	46.1	5.43	194.0	82.2	2.36	18.0	12.7	1.42	2,181.0	546.3	3.99
1931	195.9	44.9	4.36	274.0	81.4	3.36	23.0	13.2	1.74	1,320.0	527.2	2.50
1932	194.5	43.7	4.45	266.0	81.2	3.28	18.5	13.6	1.36	1,926.0	515.1	3.74
1933	198.5	41.8	4.75	268.0	78.8	3.40	23.3	13.9	1.68	1,660.0	497.8	3.33
1934	138.4	40.4	3.43	139.0	77.8	1.79	17.0	14.3	1.19	1,700.0	487.9	3.48
1935	213.1	39.0	5.46	216.0	76.5	2.82	15.0	14.3	1.05	2,194.0	479.2	4.58
1936	191.7	37.5	5.11	248.0	75.1	3.30	23.0	14.4	1.60	1.714.0	473.2	3.62
1937	223.1	37.7	5.92	311.0	75.1	4.14	21.6	14.8	1.46	2,454.0	481.2	5.10
1938	175.7	37.2	4.72	166.0	73.8	2.25	30.0	14.9	2.01	2,531.0	485.0	5.22
1939	191.6	35.8	5.35	312.0	72.7	4.29	36.0	14.6	2.47	2,228.0	483.6	4.61
1940	154.9	34.8	4.45	103.0	70.5	1.46	11.0	13.7	.80	2,250.0	481.9	4.67
1941	184.9	32.9	5.62	198.0	68.7	2.88	21.0	13.2	1.59	2,547.0	487.3	5.23
1942	143.5	32.2	4.46	204.0	67.3	3.03	33.0	12.5	2.64	2,160.0	489.7	4.41
1943	208.8	31.3	6.67	80.0	67.3	1.19	17.0	12.5	1.36	2,789.0	490.4	5.69
1944	147.5	31.2	4.73	324.0	66.9	4.84	27.0	12.4	2.18	2,514.0	490.7	5.12
1945	254.1	31.6	8.04	159.0	67.0	2.37	38.0	12.4	3.06	2,663.0	493.0	5.40
1946	183.6	31.8	5.77	306.0	67.3	4.55	34.0	12.3	2.76	2,958.0	493.5	5.99
1947	266.0	31.6	8.42	169.0	66.3	2.55	28.0	12.1	2.31	2,836.0	500.0	5.67
1948	140.9	28.8	4.89	219.0	62.8	3.49	23.5	11.5	2.04	2,891.0	497.9	5.80
1949	226.7	27.0	8.40	165.0	53.0	3.11	44.0	9.9	4.44	2,473.0	475.4	5.20
1950	162.0	25.9	6.25	213.0	45.7	4.66	31.0	9.3	3.33	2,440.0	485.2	5.03
1951	188.0	26.0	7.23	172.0	44.1	3.90	19.8	9.4	2.11	3,228.0	480.6	6.72
1952	220.8	25.3	8.73	158.0	43.6	3.62	39.5	9.5	4.16	2,967.0	463.3	6.40
1953	172.8	23.8	7.26	230.0	43.0	5.35	2.70	9.4	2.87	2,475.0	453.6	5.46
1954c/	202.8									2,480.0		

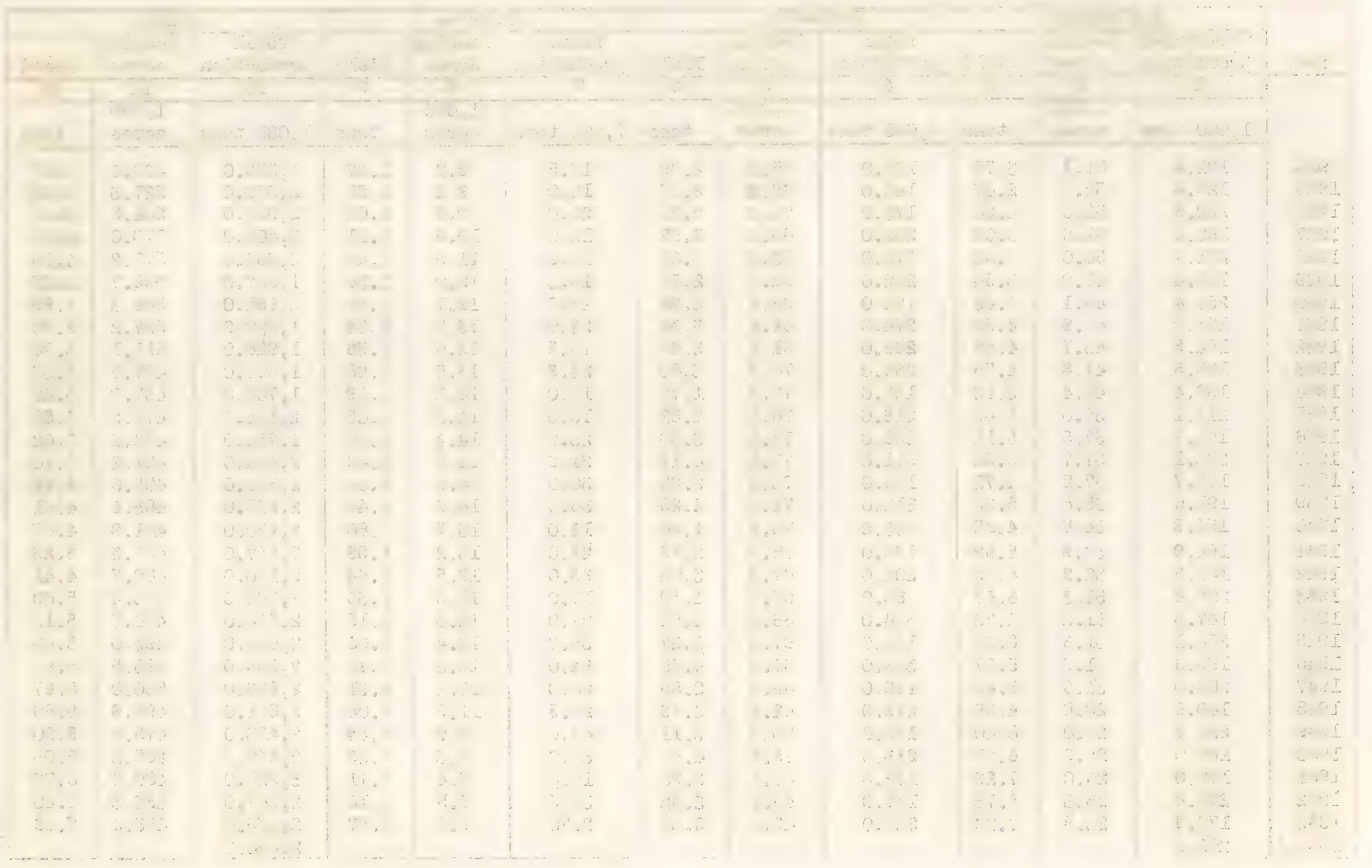

Table II continued.

Year	Freestone peaches			Pears			Plums		
	Total production	Bearing acres	Yield	Total production	Bearing acres	Yield	Total production	Bearing acres	Yield
	13	14	15	16	17	18	19	20	21
	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons	1,000 tons	1,000 acres	tons
1924	208.8	58.4	3.56	133.0	45.2	2.94	42.0	24.6	1.71
1925	172.0	57.3	3.00	181.0	48.9	3.70	54.0	27.3	1.98
1926	226.0	56.7	3.99	204.0	53.3	3.83	74.0	29.0	2.55
1927	175.0	56.1	3.12	181.0	56.7	3.19	58.0	29.9	1.94
1928	218.0	55.8	3.91	226.0	59.7	3.79	67.0	30.9	2.17
1929	156.0	54.0	2.89	190.0	64.7	2.94	40.0	31.6	1.27
1930	280.0	53.4	5.02	273.0	65.8	4.15	82.0	30.6	2.68
1931	203.0	52.5	3.87	219.0	65.9	3.32	65.0	30.0	2.17
1932	210.0	51.6	4.07	244.0	67.0	3.64	68.0	30.1	2.26
1933	201.0	49.4	4.07	222.0	65.7	3.38	57.0	28.9	1.97
1934	191.0	46.5	4.11	234.0	62.1	3.77	62.0	27.6	2.25
1935	157.0	42.5	3.69	165.0	57.8	2.86	48.0	26.3	1.83
1936	134.0	39.3	4.94	241.0	53.6	4.50	64.0	25.1	2.55
1937	206.0	38.9	5.30	227.0	52.6	4.32	66.0	25.0	2.64
1938	197.0	38.2	5.16	284.0	50.8	5.59	63.0	24.6	2.56
1939	231.0	38.0	6.08	253.0	48.3	5.24	71.0	23.8	2.98
1940	232.0	36.8	6.30	226.0	45.8	4.93	69.0	22.0	3.14
1941	227.0	37.3	6.09	223.0	44.2	5.04	71.0	21.5	3.30
1942	266.0	37.3	7.10	234.0	43.8	5.34	72.0	21.2	3.40
1943	249.0	38.1	6.54	301.0	43.9	6.86	76.0	21.5	3.53
1944	325.0	39.1	8.31	250.0	43.9	5.69	92.0	21.8	4.22
1945	274.0	40.4	6.78	341.0	44.0	7.75	71.0	22.8	3.11
1946	336.0	41.1	8.18	310.0	44.2	7.01	100.0	23.3	4.29
1947	279.0	40.4	6.91	345.0	43.8	7.88	74.0	24.1	3.07
1948	223.0	37.7	5.92	256.0	42.8	5.98	67.0	25.4	2.64
1949	267.0	31.9	8.37	392.0	40.9	9.59	90.0	24.9	3.61
1950	240.0	32.8	7.32	340.0	39.3	8.65	77.0	23.5	3.28
1951	272.0	32.7	8.32	360.0	39.6	9.09	97.0	23.3	4.16
1952	270.0	32.3	8.36	385.0	39.4	9.77	53.0	23.2	2.28
1953	255.0	31.9	7.99	290.0	38.8	7.47	86.0	22.0	3.91
1954c/	299.0			406.0			67.0		

(Continued on next page.)

Table II continued.

a/ Commercial production of apples for years prior to 1934 was determined by multiplying total production figures by .896.

b/ Bushels converted to tons by multiplying by .024. One bushel = 48 pounds.

c/ 1954 figures are preliminary.

Sources:

Cols. 1, 4, 7, 10, 13, 16, and 19: U. S. Bureau of Agricultural Economics, Fruits (Non-Citrus) Production, Farm Disposition, Value, and Utilization of Sales, 1924-1953.

Cols. 2, 5, 8, 11, 14, 17, and 20: For years 1924 through 1946--U. S. Bureau of Agricultural Economics, Fruits and Nuts, Bearing Acreage, 1924-1946; for subsequent years--California Crop and Livestock Reporting Service, Acreage Estimates, California Fruit and Nut Crops.

Cols. 3, 6, 9, 12, 15, 18, and 21: Derived by dividing production columns by their respective bearing acreage columns.

TABLE III

California Nonbearing Acreage of Various Deciduous Fruits

Year	Apples	Apricots	Cherries	Grapes	Freestone peaches	Pears	Plums
	1	2	3	4	5	6	7
	1,000 acres						
1924	18.6	21.0	2.7	143.0	15.5[a]	25.6	7.8
1925	16.1	25.9	4.0	71.7	15.0[a]	30.4	9.0
1926	14.4	26.3	5.6	27.6	14.4	36.2	11.4
1927	7.6	17.0	5.6	40.7	12.0	31.5	5.1
1928	6.8	12.3	5.0	29.7	8.8	29.8	4.6
1929	5.9	10.3	4.9	18.2	8.4	25.2	4.2
1930	6.0	9.5	4.6	11.8	7.7	21.6	3.8
1931	5.7	8.6	4.7	7.7	6.3	17.3	3.6
1932	4.2	6.7	4.2	5.0	4.9	12.4	3.3
1933							
1934							
1935							
1936	2.7	4.8	2.2	28.6	8.0	5.7	3.0
1937	2.7	5.0	2.0	20.1	8.9	4.8	2.3
1938	2.5	5.4	1.7	22.6	9.4	3.7	2.0
1939	2.3	5.1	1.2	26.0	9.0	2.9	1.7
1940	2.2	4.7	1.1	25.7	7.7	2.2	2.4
1941	2.0	3.9	1.0	20.4	6.1	1.9	2.3
1942	1.7	3.5	1.0	16.3	5.6	1.8	3.2
1943	1.7	3.3	0.9	16.7	5.2	1.5	3.8
1944	1.6	3.0	0.9	20.1	5.2	1.2	4.4
1945	1.5	2.5	0.8	35.6	5.8	1.0	4.3
1946	1.8	2.3	0.7	49.0	6.9	0.9	4.7
1947	2.7	1.9	0.9	55.8	7.8	1.3	4.7
1948	3.1	1.6	1.1	41.9	7.6	1.4	3.9
1949	3.9	1.8	1.4	30.4	6.6	1.5	2.8
1950	3.8	1.8	1.9	18.5	5.2	3.1	2.9
1951	3.5	1.4	1.9	15.6	8.2	3.4	2.8
1952	3.1	1.1	1.8	13.0	6.5	3.3	2.5
1953	2.4	1.1	1.9	10.5	7.1	4.2	3.2

(Continued on next page.)

Table III continued.

a/ Nonbearing acreage for freestone peaches, years 1924 and 1925, estimated by authors.

Sources: For years prior to 1927--U. S. Department of Agriculture cooperating with California Department of Agriculture, California Crop Report; for subsequent years--California Crop and Livestock Reporting Service, Acreage Estimates, California Fruit and Nut Crops.

TABLE IV

Total Amounts Sold and Fresh Sales of Various Deciduous Fruits, United States and California

Year	Apples[a]				Apricots				Cherries				Grapes			
	Amounts sold		Fresh sales		Amounts sold		Fresh sales		Amounts sold		Fresh sales		Amounts sold		Fresh sales	
	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1,000 tons															
1924						134.5		11.5	69.5	13.0		9.2	1,724.2	1,528.2		801.9
1925						147.4		10.8	63.4	11.6		6.8	2,019.6	1,905.4		989.2
1926						171.4		9.2	95.8	19.5		9.7	2,312.2	2,047.6		904.6
1927						204.3		12.8	53.0	11.6		7.4	2,404.9	2,257.9		1,052.6
1928						171.3		13.3	82.8	16.2		10.2	2,446.1	2,207.1		1,041.5
1929					218.0	210.1	21.1	15.4	81.1	15.8		8.0	2,036.9	1,821.3		873.1
1930					187.2	183.3	20.6	16.8	104.1	17.6		9.2	2,291.1	2,058.4		883.1
1931					274.2	267.7	30.1	24.2	96.5	19.5		12.8	1,581.1	1,304.6		567.3
1932					256.7	250.7	29.3	23.9	110.5	16.5		10.2	2,024.1	1,766.7		605.2
1933					268.8	266.1	18.8	16.2	115.3	24.4		12.4	1,883.6	1,653.3		415.3
1934	2,334.2	136.8	1,771.0	67.3	150.9	137.3	20.7	12.0	119.6	16.6	51.3	9.6	1,908.1	1,696.4	633.1	469.0
1935	2,937.7	211.4	2,192.8	101.4	223.7	214.3	22.0	14.8	129.2	14.7	40.5	7.5	2,429.5	2,190.5	671.2	485.1
1936	2,182.3	190.1	1,655.9	99.2	254.4	246.3	22.6	16.4	110.0	22.8	40.2	11.7	1,858.1	1,710.5	576.3	479.7
1937	3,165.9	207.7	2,355.0	111.4	321.9	309.3	29.7	19.3	130.3	21.4	35.5	10.8	2,671.4	2,450.5	683.9	538.0
1938	2,291.6	171.2	1,813.1	102.0	180.4	164.3	30.6	18.6	120.4	24.9	45.6	14.1	2,638.7	2,527.5	551.0	491.7
1939	2,811.9	179.3	2,012.1	86.3	320.3	302.3	34.5	21.1	163.9	32.7	49.0	15.6	2,409.6	2,224.6	601.2	513.0
1940	2,403.3	138.9	1,876.7	80.6	123.7	101.3	26.2	13.0	156.0	10.7	43.7	6.9	2,427.3	2,246.7	633.2	550.8
1941	2,711.1	175.1	1,911.1	85.0	211.1	196.3	26.7	15.7	146.0	20.7	46.9	12.0	2,690.2	2,543.7	623.5	565.7
1942	2,687.1	140.8	1,868.5	68.8	220.3	197.3	33.5	17.9	171.1	27.7	49.4	15.4	2,358.5	2,156.7	593.8	519.2
1943	1,979.0	206.1	1,394.5	103.6	101.3	78.3	33.0	16.2	101.8	15.7	44.3	10.1	2,933.5	2,786.3	425.6	377.5
1944	2,714.7	144.8	1,867.4	68.2	348.6	322.2	56.1	34.6	180.9	26.7	52.9	15.9	2,665.1	2,511.3	445.0	401.3
1945	1,530.7	250.9	1,134.3	104.9	187.8	157.3	44.5	23.6	137.2	37.7	49.3	16.0	2,735.6	2,648.3	516.3	498.1
1946	2,711.7	180.9	1,815.8	79.9	335.6	304.3	46.5	26.1	216.5	33.7	46.9	14.5	3,112.8	2,955.3	547.2	516.7
1947	2,485.8	236.3	1,853.0	124.2	196.1	167.3	41.5	20.7	159.1	27.7	45.4	13.8	2,996.0	2,833.3	651.8	619.2
1948	2,024.2	138.2	1,557.3	63.9	214.5	191.3	40.7	20.9	201.9	23.2	37.9	7.7	3,037.5	2,888.3	569.0	543.8
1949	2,819.4	224.0	1,949.6	101.2	180.5	158.3	39.3	19.9	225.9	43.7	61.4	17.2	2,601.0	2,470.3	542.4	520.2
1950	2,786.8	159.3	1,838.9	77.6	213.1	211.3	27.4	25.8	228.5	30.7	44.1	17.0	2,660.4	2,437.3	522.8	497.4
1951	2,310.1	185.3	1,654.1	89.5	180.4	170.3	28.3	20.3	209.8	19.5	35.4	8.8	3,365.9	3,225.3	608.4	587.2
1952	2,122.8	218.1	1,548.0	104.4	173.5	156.3	31.8	17.4	199.6	39.2	50.8	16.8	3,143.6	2,964.3	613.0	587.4
1953	2,135.9	170.1	1,528.8	66.1	240.6	228.3	27.9	17.8	214.8	26.7	43.6	13.6	2,676.4	2,472.3	530.1	507.9

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Table IV continued.

Year	Freestone peaches[a/b/c/]				Pears[a/]				Plums				Fresh sales of prunes	
	Amount sold		Fresh sales		Amount sold		Fresh sales		Amount sold		Fresh sales			
	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California
	17	18	19	20	21	22	23	24	25	26	27	28	29	30
	1,000 tons													
1924	911.7	203.6		34.4	362.8	130.6		76.3	46.2	41.8		40.3		
1925	688.7	167.8		43.0	410.5	178.5		101.2	56.6	53.8		50.8		
1926	1,014.5	222.2		34.1	497.1	201.5		127.1	80.3	73.8		70.0		
1927	583.9	171.5		61.0	371.1	176.7		108.7	60.8	57.8		55.5		
1928	942.9	214.7		41.9	507.2	221.8		129.7	72.1	66.8		63.9		
1929	714.0	153.5		44.1	445.2	187.9		109.5	43.3	39.8		37.8	66.7	
1930	676.8	265.3		92.9	553.5	240.0		165.9	87.8	81.8		78.7	55.2	
1931	1,203.9	200.5		64.5	499.3	202.3		130.7	63.3	57.7		56.2	41.4	
1932	579.8	207.7		65.2	445.5	179.3		112.0	62.7	57.7		56.5	45.2	
1933	609.0	198.8		53.9	455.4	180.4		91.4	53.4	49.7		47.9	35.8	
1934	697.8	189.0	549.0	48.9	576.9	223.5	386.6	126.3	66.4	61.7	64.2	59.9	46.9	
1935	870.4	155.0	746.4	44.1	539.0	163.6	372.0	93.6	52.4	47.7	49.9	45.6	47.7	
1936	725.1	192.0	579.3	56.8	589.5	239.7	374.6	120.1	67.1	63.7	65.6	62.4	43.3	
1937	911.5	204.0	750.9	62.2	600.8	213.7	411.8	117.9	70.1	65.7	66.8	62.7	33.7	
1938	842.3	195.0	699.2	66.8	623.8	264.7	434.2	158.8	64.9	62.7	63.8	61.7	45.7	
1939	1,004.0	229.0	824.3	77.5	603.6	246.7	366.4	116.5	68.8	63.7	67.1	62.3	53.5	
1940	907.0	230.0	733.0	79.8	605.0	215.7	382.4	102.0	68.2	63.7	67.0	62.8	44.7	
1941	1,239.9	225.0	1,038.2	83.1	621.4	221.7	348.4	77.4	71.2	65.7	69.0	64.0	42.0	
1942	1,026.4	263.0	809.6	103.2	638.9	230.7	363.5	77.2	69.5	65.7	68.2	64.7	50.8	
1943	610.8	247.0	470.1	124.8	537.0	294.7	300.9	126.5	77.9	75.7	70.6	68.4	37.2	
1944	1,217.9	322.0	990.8	140.4	669.0	245.7	405.6	97.2	93.7	89.7	85.6	82.0	55.7	
1945	1,283.7	272.0	1,035.8	107.9	702.6	331.7	435.9	162.0	71.1	69.7	64.8	63.5	63.8	
1946	1,296.7	334.0	1,016.4	134.5	738.0	308.7	431.6	125.9	105.2	99.7	96.1	92.0	49.5	
1947	1,158.8	271.0	921.3	117.3	749.0	345.7	404.3	128.6	78.4	73.7	75.2	70.9	57.1	
1948	852.5	218.0	712.5	113.6	545.8	254.7	257.5	53.0	71.1	66.7	69.2	65.1	50.4	
1949	947.0	265.0	763.4	123.3	709.2	362.7	388.8	154.6	86.9	79.7	84.1	77.5	52.1	
1950	677.7	238.0	539.4	128.1	654.0	338.7	306.2	102.9	81.3	74.7	78.4	73.1	23.0	
1951	834.6	270.0	640.2	116.4	664.6	358.7	290.5	105.0	98.1	93.7	94.1	91.0	38.3	
1952	934.0	268.0	734.1	129.7	689.4	383.7	348.2	139.6	59.6	52.7	55.7	50.6	44.8	
1953	908.9	253.0	714.6	112.6	648.9	288.7	332.3	88.3	84.6	78.7	81.1	70.0	45.6	

(Continued on next page.)

Table IV continued.

a/ Bushels converted to tons by multiplying by .024. One bushel = 48 pounds.

b/ Amount sold of freestone peaches equals amount sold of all peaches minus amount sold of California clingstone peaches.

c/ Fresh sales of freestone peaches equals fresh sales of all peaches minus fresh sales of California clingstone peaches.

Source: U. S. Bureau of Agricultural Economics, Fruits (Non-Citrus) Production, Farm Disposition, Value, and Utilization of Sales, 1924-1953.

TABLE V

Estimated Total and Fresh Disappearance, Selected Fruits

Year	Apples		Apricots		Cherries		Grapes		Freestone peaches		Pears		Plumes and prunes	
	Fresh	Total	Fresh	Total	Fresh	Total	Fresh	Total	Fresh[b]	Total[c]	Fresh	Total	Fresh	Total
	1	2	3	4[a]	5	6[a]	7	8[a]	9	10[a]	11	12[a]	13	14[a][d]
	pounds per capita													
1924	53.4	56.0	0.2	1.5	1.8		8.8	28.4	16.1	19.1	6.3	7.2	2.1	2.2
1925	45.6	48.7	0.2	1.5	1.8		8.2	30.8	12.4	14.6	5.9	7.2	2.4	2.5
1926	61.4	64.0	0.2	1.9	2.4		9.6	35.0	17.6	20.6	7.7	9.0	3.4	3.6
1927	36.9	39.3	0.3	2.2	1.3		8.9	34.4	10.2	11.7	5.4	6.6	2.8	2.9
1928	48.3	50.6	0.3	1.6	1.7		10.8	33.9	16.0	18.3	6.7	8.3	3.3	3.4
1929	39.2	42.2	0.4	2.5	1.3		9.0	29.7	12.7	14.3	5.7	7.5	2.5	2.6
1930	41.5	44.6	0.4	1.8	1.2		8.6	33.5	10.0	12.1	6.6	8.0	3.7	3.8
1931	50.9	53.0	0.5	2.6	1.4		8.3	22.3	21.0	22.6	7.1	7.9	2.7	2.8
1932	38.6	40.5	0.5	2.5	1.6		7.7	29.4	8.7	10.5	5.2	6.3	2.8	2.9
1933	39.5	41.5	0.3	2.5	1.4		6.8	27.6	9.6	11.4	5.1	6.4	2.3	2.4
1934	24.9	27.2	0.4	1.6	1.2	2.1	7.3	27.8	10.8	12.7	6.7	8.8	2.9	3.0
1935	32.5	35.0	0.4	2.1	1.1	2.2	7.2	35.1	14.2	15.6	6.1	7.7	2.5	2.6
1936	27.2	30.0	0.4	2.5	1.0	1.8	6.3	25.8	10.5	12.3	5.9	8.3	2.6	2.7
1937	33.1	36.2	0.5	3.4	1.0	2.2	7.3	37.2	13.8	15.9	6.6	8.8	2.6	2.7
1938	27.8	30.7	0.5	1.3	1.0	1.9	5.5	35.0	12.6	14.1	6.3	8.3	2.6	2.7
1939	30.3	33.0	0.5	3.3	1.1	2.7	6.0	33.0	14.7	17.0	6.4	8.8	2.7	2.8
1940	29.2	33.0	0.4	1.7	1.0	2.5	6.2	34.0	12.7	15.2	7.0	10.4	2.5	2.5
1941	31.2	34.5	0.4	2.6	1.1	2.4	6.2	37.6	18.2	20.9	6.3	10.2	2.3	2.4
1942	27.7	30.9	0.5	3.0	1.1	2.8	6.1	31.5	14.2	17.0	6.6	11.0	2.4	2.4
1943	24.6	27.8	0.5	1.0	0.9	1.7	5.6	41.4	8.0	9.6	5.4	8.9	2.1	2.3
1944	25.2	28.5	0.9	4.6	1.2	3.0	4.8	35.8	17.4	19.8	7.0	11.4	2.7	3.0
1945	22.6	26.3	0.7	2.6	1.1	2.2	5.4	38.6	17.8	21.5	7.2	11.6	2.3	2.5
1946	22.7	27.6	0.7	4.2	1.0	3.2	5.7	42.8	16.3	19.0	6.7	10.8	2.7	2.9
1947	25.0	28.7	0.6	2.5	0.9	2.4	6.6	34.0	14.4	17.5	5.8	11.0	2.2	2.3
1948	25.9	30.8	0.6	2.6	0.8	2.9	5.8	37.8	11.0	12.7	4.4	8.3	2.1	2.2
1949	24.7	29.9	0.6	2.2	1.1	3.2	5.2	30.3	11.5	13.9	6.0	10.3	2.4	2.5
1950	22.9	29.0	0.3	2.6	0.8	3.2	5.4	42.3	7.8	9.5	4.5	9.2	1.8	1.8
1951	25.4	31.0	0.4	2.2	0.7	2.9	5.8	39.9	9.3	11.8	4.5	9.4	2.3	2.4
1952	21.1	27.5	0.4	2.1	0.8	2.8	5.7	35.2	10.5	13.0	5.1	9.5	1.7	1.8
1953	20.1	28.6[a]	0.4	2.7	0.7	2.9	5.1	30.9	10.0	12.4	4.7	8.6	2.0	2.2

(Continued on next page.)

Table V continued.

a/ Total consumption equals production of value minus exports plus imports divided by the number eating out of civilian supplies as of July 1 for each year for years 1940-1953. Prior to 1940, total population figures were used.

b/ Per-capita fresh consumption of freestone peaches equals per-capita fresh consumption of all peaches minus fresh sales of cling peaches divided by number eating out of civilian supplies as of July 1 each year.

c/ Per-capita total consumption of freestone peaches equals (production of value of all peaches minus production of value of California clingstone peaches minus fresh and dried exports) divided by number eating out of civilian supplies as of July 1 each year (1940-1953). Total population, including those in armed forces, used prior to 1940.

To convert production of value figures from bushels to pounds, 1 bushel equals 48 pounds. This was done to figure per-capita total consumption of apples, freestone peaches, and pears.

d/ Includes plums and prunes other than dried. Estimated by dividing amount of California plums sold by fresh sales of California plums, then multiplying these ratios by per-capita fresh consumption of plums and prunes.

Sources:

Cols. 1, 2, 3, 5, 7, 9, 11, and 13: For years prior to 1953--U. S. Bureau of Agricultural Economics, Consumption of Food in the United States, 1909-1952, p. 139; for the year 1953--U. S. Agricultural Marketing Service, The National Food Situation, August 2, 1954, p. 25.

Cols. 4, 6, 8, 10, 12, and 14: Production of value figures supplied by U. S. Bureau of Agricultural Economics, Fruits (Non-Citrus) Production, Farm Disposition, Value and Utilization of Sales, 1924-1953. Export and import figures are from U. S. Department of Agriculture, Foreign Agricultural Service, United States Farm Products in Foreign Trade for years 1924-1950, and Foreign Agricultural Trade for subsequent years. Population figures supplied by U. S. Bureau of Agricultural Economics, Consumption of Food in the United States, 1909-1952; and for 1953 by U. S. Agricultural Marketing Service, The National Food Situation, August 2, 1954, p. 43.

TABLE VI

United States and California Average Prices Received by Growers of Various Deciduous Fruits

Year	Apples[a]		Apricots		Cherries		Grapes		Peaches[a]	Freestone peaches[a]	Pears[a]		Plums	
	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California	United States	California
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	dollars per ton													
1924	51.25	31.25		52.30	128.93	140.00	37.90	31.50	54.58	22.50	65.42	72.50	87.30	95.20
1925	52.50	37.92		61.80	141.41	160.00	33.10	29.20	65.42	34.58	61.67	52.92	67.30	69.40
1926	36.67	20.42		68.00	143.81	180.00	26.40	23.90	44.17	37.92	42.50	37.50	46.30	48.90
1927	61.67	40.42		57.30	168.36	180.00	27.00	24.20	52.08	32.08	65.00	57.50	76.60	79.00
1928	45.42	23.33		51.40	151.40	150.00	20.10	16.10	42.92	24.58	50.83	44.17	64.40	67.20
1929	57.92	47.50	64.80	64.40	159.22	190.00	27.30	23.80	62.08	44.17	71.25	73.33	107.00	113.00
1930	42.92	20.42	40.59	40.30	127.26	148.00	19.50	16.30	41.67	20.83	35.00	25.00	48.30	49.40
1931	26.67	22.08	30.16	30.10	65.90	93.00	22.60	20.20	25.00	19.58	32.08	29.17	40.00	41.80
1932	25.42	13.75	19.08	18.90	42.35	60.00	13.40	11.70	25.00	12.50	20.42	14.58	29.90	30.90
1933	32.92	19.58	30.46	30.10	55.34	66.00	18.00	16.10	33.33	20.42	28.33	22.50	36.80	37.00
1934	36.67	21.67	54.20	55.00	58.62	90.50	19.80	17.50	36.25	23.33	33.33	33.33	43.70	44.50
1935	30.00	18.33	46.77	46.30	70.70	125.00	14.90	12.90	37.08	26.25	30.83	29.58	51.70	54.30
1936	43.33	20.83	38.98	38.30	76.19	101.55	21.40	19.10	41.67	26.67	32.92	26.25	41.00	41.20
1937	26.67	17.92	38.57	37.60	104.42	169.75	20.40	19.00	43.33	25.42	31.67	28.75	56.60	58.30
1938	34.17	18.75	36.00	36.60	66.20	84.20	14.50	12.80	32.08	20.00	23.75	13.75	37.60	37.30
1939	26.67	17.08	33.40	33.40	61.30	79.30	15.90	13.70	34.17	22.08	30.83	26.67	44.90	46.00
1940	33.33	17.50	50.30	53.60	78.60	141.00	17.20	15.50	32.92	21.67	30.83	25.83	51.90	53.00
1941	40.00	27.50	46.00	46.10	107.00	127.00	24.10	22.40	37.92	35.83	42.92	40.42	61.00	63.20
1942	57.08	48.33	71.20	69.90	120.00	148.00	35.60	33.40	62.50	51.25	64.58	64.17	91.80	93.40
1943	99.58	81.25	132.00	121.00	211.00	270.00	62.20	60.70	112.08	94.17	98.33	77.92	169.00	169.00
1944	83.33	80.00	110.00	108.00	211.00	290.00	78.20	77.20	95.83	88.75	92.08	87.08	118.00	117.00
1945	120.42	90.83	119.00	118.00	268.00	282.00	58.60	56.50	92.08	87.50	92.08	79.17	138.00	138.00
1946	95.83	74.17	106.00	106.00	291.00	304.00	93.20	90.50	86.67	82.50	103.75	95.83	135.00	137.00
1947	74.58	38.75	89.00	86.40	225.00	251.00	39.30	36.00	67.08	55.00	82.50	73.75	154.00	157.00
1948	92.50	50.83	69.00	68.20	218.00	326.00	38.50	35.60	82.08	70.42	110.00	115.00	146.00	150.00
1949	57.50	33.75	72.50	76.20	171.00	182.00	35.70	32.50	60.00	56.67	50.00	31.67	101.00	105.00
1950	65.83	56.25	95.30	94.70	166.00	272.00	68.20	65.00	85.42	88.75	89.17	75.00	172.00	180.00
1951	74.17	55.42	121.00	120.00	188.00	361.00	40.10	37.60	84.17	78.75	101.25	95.00	142.00	144.00
1952	106.67	61.25	115.00	114.00	163.00	221.00	39.60	35.90	83.75	82.92	72.08	50.83	246.00	226.00
1953	110.83	84.58	119.00	116.00	217.00	299.00	48.30	43.10	78.75	71.67	84.58	71.67	156.00	161.00

Table VI continued.

a/ Prices per bushel converted to prices per ton by multiplying by 41.667. One bushel = 48 pounds. One ton contains 41.667 bushels.

Source: U. S. Bureau of Agricultural Economics, Fruits (Non-Citrus) Production, Farm Disposition, Value and Utilization of Sales, 1924-1953.

TABLE VII

United States Exports and Imports of Various Deciduous Fruits
(Weights in Fresh Weight Equivalents)

Year beginning July 1	Apples[a]							Apricots						
	Exports				Imports	Exports as per cent of production	Imports as per cent of production	Exports				Imports[h]	Exports as per cent of production	Imports as per cent of production[h]
	Fresh	Canned[b]	Dried[c]	Total				Fresh[d]	Canned[e]	Dried[f/g]	Total			
	1	2	3	4	5	6	7	8	9	10	11	12	13	14
	1,000 tons							1,000 tons						
1924	230.5	13.5	67.3	311.3	2.5	8.1	0.1	--	12.7	34.2	46.9		34.4	
1925	264.4	12.9	86.9	364.2	1.8	10.0	--	--	11.9	46.6	58.5		39.3	
1926	511.0	16.2	114.3	641.5	2.0	11.6	--	--	14.5	46.0	60.5		35.0	
1927	226.3	13.8	76.0	316.1	3.7	11.4	0.1	--	11.7	60.9	72.6		34.9	
1928	505.0	27.6	175.1	707.7	2.8	16.6	0.1	--	12.2	63.4	75.6		42.6	
1929	246.7	20.1	83.5	350.3	7.5	10.8	0.2	--	16.4	49.5	65.9		29.9	
1930	488.2	15.4	137.0	640.6	2.5	17.0	0.1	--	10.8	65.4	76.2		38.4	
1931	432.7	16.7	114.3	563.7	2.0	11.4	--	--	12.5	101.6	114.1		40.6	
1932	330.1	18.0	140.1	488.2	0.1	13.9	--	--	10.5	92.5	103.0		37.8	
1933	294.3	10.5	154.1	458.8	0.3	12.9	--	--	13.7	97.9	111.6		41.2	
1934	193.5	13.5	88.5	295.5	0.7	9.6	--	--	7.3	42.7	50.0		32.5	
1935	293.7	21.6	124.3	439.6	0.1	10.5	--	--	14.7	72.9	87.6		38.5	
1936	162.1	12.1	82.4	256.6	0.9	9.2	--	0.2[i]	13.3	78.3	91.8		35.7	
1937	263.0	11.9	100.7	375.6	0.1	7.8	--	2.6	14.0	88.1	104.7		32.3	
1938	289.7	15.0	127.8	432.5	1.1	14.4	--	1.5	17.5	80.7	99.7		53.8	
1939	77.2	12.9	63.6	153.7	2.6	4.6	0.1	1.5	17.9	87.0	106.4		32.1	
1940	20.8	0.7	13.2	34.7	14.1	1.3	0.5	1.3	0.6	8.6	10.5		8.3	
1941	41.5	1.8	55.9	99.2	0.3	3.4	--	1.3	2.8	38.5	42.6		19.9	
1942	10.4	0.6	39.2	50.2	13.0	1.7	0.4	2.1	5.0	28.2	35.3		15.5	
1943	7.6	3.8	59.2	70.6	4.3	3.4	0.2	2.1	5.0	31.0	38.1		36.5	
1944	30.9	0.5	39.9	71.3	57.5	2.4	2.0	1.2	9.3	40.6	51.1		14.5	
1945	31.2	1.1	15.8	48.1	6.6	2.8	0.4	1.2	14.4	8.3	23.9		12.5	
1946	124.3	2.7	44.7	171.7	24.1	5.7	0.8	3.6	16.4	24.1	44.1		13.0	
1947	69.1	2.1	15.0	86.2	30.1	3.0	1.1	2.0	6.8	12.5	21.3		10.5	
1948	32.7	1.2	4.3	38.2	55.9[j]	1.8	2.6	0.0	6.5	17.8	24.3		9.9	
1949	70.5	1.0	11.2	82.7	49.1[j]	2.6	1.5	2.7	5.2	10.9	18.8		9.4	
1950	69.9	1.0	8.8	79.7	51.7	2.8	1.8	3.0	4.9	11.8	19.7		9.1	
1951	81.7	1.1	28.9	111.7	49.8	4.2	1.9	2.6	5.9	8.1	16.6		9.1	
1952	29.7	1.1	13.0	43.8	25.4	2.0	1.1	1.3	6.2	6.8	14.3		8.1	
1953	34.4	0.8	7.0	42.2	43.8	1.9	2.0	1.8	8.2	16.3	26.3		10.8	

Table VII continued.

Year beginning July 1	Cherries							Grapes						
	Exports				Imports	Exports as per cent of production	Imports as per cent of production	Exports				Imports [m/ o/ p/]	Exports as per cent of production	Imports as per cent of production
	Fresh [k/]	Canned [l/]	Dried	Total				Fresh	Canned	Dried [m/]	Total [n/]			
	15	16	17	18	19	20	21	22	23	24	25	26	27	28
	1,000 short tons							1,000 short tons						
1924		0.8		0.8	25.4	1.0	32.0	10		168	178	46	10.0	2.6
1925		0.8		0.8	29.3	1.1	39.7	12		250	262	12	11.9	0.5
1926		1.1		1.1	42.8	1.0	39.8	15		282	297	9	12.5	0.4
1927		0.9		0.9	10.0	1.4	16.3	19		358	377	6	14.5	0.2
1928		1.3		1.3	7.6	1.6	8.1	28		411	439	8	16.5	0.3
1929		1.4		1.4	13.3	1.7	13.6	23		238	261	7	12.5	0.3
1930		1.1		1.1	7.2	1.1	5.9	25		232	257	9	10.5	0.4
1931		0.8		0.8	3.3	0.9	2.6	14		226	240	8	14.6	0.5
1932		0.7		0.7	1.1	0.7	0.8	15		208	223	7	10.0	0.3
1933		1.1		1.1	1.0	1.1	0.7	13		174	187	9	9.6	0.5
1934		1.2		1.2	0.8	1.1	0.6	18		174	192	14	9.8	0.7
1935	0.4	1.4		1.8	0.8	1.5	0.6	19		202	221	10	8.9	0.4
1936	0.3	1.5		1.8	0.5	1.8	0.4	23		208	231	9	12.2	0.5
1937	0.7	1.8		2.5	1.1	2.0	0.7	35		262	297	9	10.9	0.3
1938	1.0	3.6		4.6	0.6	3.5	0.4	40		284	324	9	12.1	0.3
1939	0.4	2.0		2.4	1.2	1.5	0.6	30		235	265	7	10.8	0.3
1940	0.5	0.5		1.0	--	0.6	--	31		160	191	6	7.7	0.2
1941	0.5	0.6		1.1	--	0.7	--	32		188	220	6	8.1	0.2
1942	0.4	0.4		0.8	--	0.4	--	22		273	295	2	12.3	0.1
1943	0.4	0.3		0.7	0.2	0.7	0.1	24		440	264	1	15.6	
1944	0.6	0.2		0.8	--	0.4	--	22		347	369	5	13.6	0.2
1945	0.4	0.8		1.2	0.1	0.9	--	29		205	234	6	8.4	0.2
1946	1.0	1.8		2.8	2.3	1.4	1.0	36		113	149	16	4.7	0.5
1947	0.8	0.9		1.7	5.3	1.1	3.1	47		526	573	8	18.9	0.3
1948	--	0.8		0.8	2.1	0.5	1.0	38		247	285	9	9.3	0.3
1949	0.6	0.6		1.2	2.5	0.6	1.0	46		321	367	9	13.8	0.3
1950	0.6	0.8		1.4	4.8	0.6	2.0	45		142	187	21	6.9	0.8
1951	1.2	0.9		2.1	7.4	0.9	3.2	53		296	349	16	10.3	0.5
1952	1.0	1.1		2.1	8.2	1.0	3.8	58		393	451	20	14.3	0.6
1953	1.1	0.9		2.0	6.9	0.9	3.1	49		220	269	20	10.0	0.7

Table VII continued.

Year beginning July 1	Peaches a/							Pears g/						
	Exports				Imports h/	Exports as per cent of production	Imports as per cent of production h/	Exports				Imports	Exports as per cent of production	Imports as per cent of production
	Fresh	Canned r/	Dried s/	Total				Fresh	Canned t/ u/	Dried v/ w/	Total			
	29	30	31	32	33	34	35	36	37	38	39	40	41	42
	1,000 tons							1,000 tons						
1924	8.1	28.7	12.0	48.8		3.9		20.7	31.5	--	52.2		11.2	
1925	7.9	41.6	8.6	58.1		5.3		35.6	44.4	--	80.0		15.9	
1926	7.2	40.9	17.9	66.0		4.1		37.0	38.6	--	75.6		12.4	
1927	9.0	43.3	16.8	69.1		6.6		25.5	30.8	--	56.3		12.3	
1928	11.0	54.0	32.0	97.0		6.1		41.4	51.7	7.2	100.3		16.4	
1929	10.0	43.2	12.6	65.8		6.0		31.0	38.2	10.7	79.9		14.7	
1930	6.4	44.2	35.0	85.6		6.3		67.3	50.0	28.8	146.1		21.5	
1931	5.4	39.6	35.7	80.7		4.3		45.4	48.4	23.8	117.6		18.6	
1932	1.7	42.9	32.2	76.8		7.3		60.0	41.0	23.7	124.7		20.3	
1933	1.7	48.8	30.6	81.1		7.3		55.5	54.1	28.6	138.2		23.0	
1934	2.4	31.4	26.6	60.4		5.2		50.3	48.1	20.8	119.2	0.1	17.0	
1935	5.0	59.6	27.7	92.3		6.9		62.1	56.4	27.4	145.9	0.4	22.5	0.1
1936	8.0	37.8	27.1	72.9		6.2		65.6	47.0	24.4	137.0	1.6	20.0	0.2
1937	4.1	34.7	27.6	66.4		4.6		67.4	41.2	21.3	129.9	1.0	17.8	0.1
1938	5.2	57.0	38.3	100.5		7.8		85.5	54.0	33.6	173.1	2.1	21.8	0.3
1939	4.4	52.5	25.6	82.5		5.4		46.5	45.7	20.7	112.9	5.5	15.4	0.8
1940	3.9	2.7	7.2	13.8		1.0		11.8	2.1	3.8	17.7	7.7	2.4	1.0
1941	3.0	9.8	23.0	35.8		2.0		11.7	10.6	19.0	41.3	3.3	5.7	0.4
1942	3.0	6.3	33.3	42.6		2.7		5.0	3.6	5.6	14.2	2.3	1.9	0.3
1943	5.5	17.2	44.6	67.3		6.6		3.0	16.0	10.2	29.2	7.1	4.9	1.2
1944	5.1	18.7	78.3	102.1		5.4		5.9	8.4	16.4	30.7	5.9	3.9	0.7
1945	10.9	16.9	15.2	43.0		2.2		24.4	10.6	5.2	40.2	7.5	4.6	0.9
1946	10.2	31.9	90.1	132.2		6.4		53.8	16.5	12.7	83.0	4.5	9.6	0.5
1947	13.3	19.4	8.8	41.5		2.1		35.2	10.2	2.4	47.8	1.1	5.4	0.1
1948	0.3	14.0	16.2	30.5		1.9		7.6	7.7	2.2	17.5	7.7	2.6	1.2
1949	0.3	15.2	4.9	20.4		1.1		11.6	8.4	5.2	25.2	4.7	2.8	0.5
1950	7.9	15.8	11.0	34.7		2.9		19.9	8.8	3.6	32.3	4.8	4.1	0.6
1951	7.7	16.6	3.9	28.2		1.8		17.0	9.9	3.2	30.1	8.6	4.0	1.1
1952	8.9	18.7	8.1	35.7		2.4		17.0	12.6	6.6	36.2	6.4	4.7	0.8
1953	8.7	29.2	6.4	44.3		2.9		18.6	11.1	6.0	35.7	3.4	4.9	0.5

Table VII continued.

Year beginning July 1	Plums	Prunes, other than dried				Total sales, plums and prunes (other than dried)	Exports, prunes and plums		
	Amount sold	Fresh sales	Canned sales	Frozen sales	Other sales		Fresh x/	Canned y/	Total z/
	43	44	45	46	47	48	49	50	51
	1,000 tons								
1924	46.2							1.3	
1925	56.6							1.2	
1926	80.3							1.3	
1927	60.8							0.9	
1928	72.1							1.0	
1929	43.3	66.7	14.0			124.0		0.7	
1930	87.8	55.2	11.2			154.2		0.6	
1931	63.3	41.4	11.6			116.3		0.4	
1932	62.7	45.2	8.1			116.0		0.4	
1933	53.4	35.8	12.7			101.9		0.3	
1934	66.4	46.9	16.9		.1	130.3		0.3	
1935	52.4	47.7	26.2		.1	126.4	2.5 aa/	0.3	2.8
1936	67.1	43.3	28.9		.1	139.4	6.2	0.2	6.4
1937	70.1	33.7	26.7		.1	130.6	6.0	0.5	6.5
1938	64.9	45.7	13.9		.2	124.7	7.9	0.6	8.5
1939	68.8	53.5	34.5		.3	157.1	6.8	2.9	9.7
1940	68.2	44.7	18.8		.3	132.0	4.6	0.2	4.8
1941	71.2	42.0	36.5	.1	.4	150.2	3.7	4.8	8.5
1942	69.5	50.8	19.2	1.9	.4	141.8	5.5	0.6	6.1
1943	77.9	37.2	35.4	13.0	1.2	164.7	2.0	1.5	3.5
1944	93.7	55.7	20.8	8.4	2.3	180.9	5.2	0.2	5.4
1945	71.1	63.8	26.7	10.1	3.7	175.4	9.2	0.7	9.9
1946	105.2	49.5	57.9	6.2	2.8	221.6	11.1	2.9	14.0
1947	78.4	57.1	26.2	1.2	.6	163.5	5.2	0.8	6.0
1948	71.1	50.4	14.4	1.0	.2	137.1	0.9	0.3	1.2
1949	86.9	52.1	26.6	3.6	.6	169.8	2.4	0.1	2.5
1950	81.3	23.0	14.4	2.7	--	121.4	4.0	0.1	4.1
1951	98.1	38.3	33.6	2.9	.1	173.0	5.4	0.2	5.6
1952	59.6	44.8	25.5	.8	--	130.7	5.1	0.2	5.3
1953	84.6	45.6	21.7	2.6	--	154.5	6.4	0.2	6.6

Table VII continued.

a/ Apples and pears converted to tons by multiplying by .024. One bushel = 48 pounds.

b/ One pound canned = 2 pounds fresh.

c/ Through 1942, 1 pound dried = 7 pounds fresh; after 1942, 1 pound dried = 8 pounds fresh. Includes apples in dried fruit for salad (7 per cent), beginning January, 1930.

d/ Not separately reported prior to January, 1937.

e/ The period 1924-1938 converted to fresh on basis that 55 cases (45 pounds each) = 1 ton fresh. Subsequent data converted on basis that 60 cases = 1 ton fresh.

f/ Exports of dried fruit converted to unprocessed dry weight by dividing by 1.07. Unprocessed dry weight converted to fresh fruit equivalent by multiplying by 5.5.

g/ Includes apricots in dried fruit for salad (12-1/3 per cent) beginning January, 1930.

h/ Imports are negligible.

i/ January to June.

j/ Includes dried and preserved separately reported in year beginning July, 1948.

k/ Not available prior to 1935.

l/ Canned, natural, sulfured or brined converted to fresh on basis that 1 ton processed = 1 ton fresh.

m/ Includes raisins and currants converted to sweatbox basis at ratio of 1 to 1.08. One ton = 4 tons fresh.

n/ Beginning January, 1941, includes small amounts of canned converted to fresh at ratio of 1 pound canned = 0.74 pounds fresh.

o/ Beginning 1933, imports for consumption.

p/ Fresh imports converted from cubic feet to pounds at rate of 40 pounds per cubic foot.

```
SELECT id, name, email, created_at
FROM users
WHERE active = 1
ORDER BY created_at DESC
LIMIT 50 OFFSET 100;
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Table VII continued.

q/ Pears converted to tons by multiplying by .025. One bushel = 50 pounds.

r/ One pound canned = 1 pound fresh. Beginning January, 1929, includes canned peaches in fruit salad (35 per cent).

s/ Converted to unprocessed dry weight by dividing by 1.07. Unprocessed dry weight converted to fresh equivalent by multiplying by 6.5 since 1929 and by 5.0 and 6.0 for earlier years.

t/ Canned converted to fresh on these bases: 1924-1942, 0.855 pounds canned = 1 pound fresh; for subsequent years, 1 pound canned = 1.2 pounds fresh.

u/ Beginning January, 1929, includes pears in canned fruit for salad (35 per cent).

v/ Dried pears converted to fresh on basis that 1 pound dried = 5.5 pounds fresh; not separately reported prior to 1929.

w/ Beginning January, 1930, includes pears in dried fruit for salad (16-2/3 per cent).

x/ Not separately reported prior to January, 1936.

y/ Canned prunes converted to fresh fruit equivalent on basis that 1 pound canned = 0.729 pounds fresh.

z/ Dried prunes excluded from exports.

aa/ January-June, not separately reported prior to this time.

Sources: For years prior to 1951--U. S. Department of Agriculture, Foreign Agricultural Service, U. S. Farm Products in Foreign Trade; for subsequent years--U. S. Department of Agriculture, Foreign Agricultural Service, Foreign Agricultural Trade.

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\documentclass[12pt,a4paper]{article}
\usepackage[utf8]{inputenc}
\usepackage[T1]{fontenc}
\usepackage{amsmath,amsfonts,amssymb}
\usepackage{graphicx}
\usepackage{hyperref}
\usepackage{geometry}
\geometry{margin=1in}

\title{Quarterly Report: Operations and Outlook}
\author{Jane Doe \and John Smith}
\date{March 31, 2024}

\begin{document}
\maketitle

\begin{abstract}
This report summarizes the operational performance of the company during the first quarter of 2024. Revenue increased by 12\% compared to the previous quarter, driven primarily by strong demand in the European market. We also discuss challenges related to supply chain disruptions and outline our strategy for the remainder of the year.
\end{abstract}

\tableofcontents

\section{Introduction}

This report covers the period from January 1 to March 31, 2024. It is intended for the board of directors and senior management. Unless otherwise noted, all figures are in thousands of US dollars.

\section{Financial Overview}

\subsection{Revenue}

Total revenue for the quarter was \$4,250. This represents an increase of \$455 over the fourth quarter of 2023. The growth was driven by a 20\% increase in unit sales and a modest 3\% increase in average selling price.

\subsection{Expenses}

Operating expenses totaled \$3,100, slightly above the budgeted amount of \$3,000. The overrun was due to unexpected freight costs. We expect expenses to return to budget in the second quarter.

\section{Operations}

\subsection{Production}

Production output reached 12,500 units, a record for the company. Overtime was required on two production lines to meet demand.

\subsection{Supply Chain}

Shipping delays from the Asia-Pacific region affected approximately 8\% of orders. We have diversified our supplier base to reduce dependence on any single vendor.

\section{Outlook}

We expect continued growth in the second quarter, with revenue projected at \$4,600. Key risks include currency fluctuations and potential tariff changes.

\end{document}
```

TABLE VIII

United States Production Having Value for Various Deciduous Fruits and Population of United States

Year	Apples[a]	Apricots	Cherries	Grapes	Freestone peaches[a]	Pears[b]	Plums	United States population[c]
	1	2	3	4	5	6	7	8
	thousands of tons							millions
1924		136.0	79.3	1,774.2	1,123.1	449.4	47.8	115.7
1925		149.0	73.8	2,061.7	874.4	484.1	57.7	117.5
1926		173.0	107.5	2,368.7	1,249.8	587.6	82.4	119.0
1927		206.0	61.4	2,449.7	730.4	436.4	61.9	120.7
1928		173.0[b]	93.7	2,500.0	1,160.5	585.8	73.9	122.2
1929		220.4	96.3	2,086.1	908.6	521.4	44.4	123.5
1930		189.4	120.4	2,340.5	799.4	621.0	89.5	124.8
1931		277.0	116.2	1,637.0	1,461.3	591.7	65.1	125.8
1932		259.6	130.3	2,078.4	697.6	504.9	64.3	126.6
1933		271.0	132.5	1,935.5	756.4	521.6	54.5	127.3
1934	2,514.2	153.5	133.4	1,957.2	840.7	657.0	67.5	128.1
1935	3,164.2	226.3	144.0	2,477.2	1,040.3	616.2	53.7	129.0
1936	2,335.1	257.0	119.5	1,897.4	833.1	647.7	67.9	129.8
1937	3,384.8	324.4	144.0	2,716.8	1,068.6	657.6	71.1	130.6
1938	2,444.4	183.2	131.8	2,671.2	971.7	688.9	65.5	131.6
1939	2,993.5	323.2	177.6	2,449.0	1,157.7	671.6	69.6	132.7
1940	2,563.5	126.6	169.2	2,464.0	1,030.6	680.0	69.0	134.0
1941	2,871.4	213.9	159.1	2,724.9	1,422.5	693.7	71.9	133.7
1942	2,840.8	223.1	184.8	2,395.5	1,168.9	716.1	70.2	133.3
1943	2,095.4	104.4	111.9	2,965.2	676.2	576.7	78.5	130.6
1944	2,861.4	351.8	195.0	2,695.8	1,373.4	734.8	94.5	130.3
1945	1,600.5	191.0	147.1	2,754.8	1,432.4	762.0	71.7	130.9
1946	2,841.5	338.7	227.4	3,137.3	1,432.5	802.5	106.0	140.3
1947	2,602.1	199.2	169.6	3,020.0	1,290.8	809.7	79.2	144.6
1948	2,123.9	217.7	212.4	3,060.8	951.4	597.6	71.8	147.2
1949	2,929.8	183.7	236.7	2,622.7	1,042.2	759.4	88.0	149.6
1950	2,894.6	215.0	238.7	3,383.4	740.7	698.5	82.1	152.3
1951	2,425.1	183.2	219.9	3,387.4	917.1	715.4	98.8	153.2
1952	2,219.7	176.4	209.4	3,164.4	1,030.2	739.1	60.4	155.5
1953	2,229.0	243.0	224.0	2,696.0	1,000.4	696.1	85.4	158.3

(Continued on next page.)

Table VIII continued.

a/ Bushels converted to tons by multiplying by .024. One bushel = 48 pounds.

b/ For years prior to 1929, production having value is for California only.

c/ Figures as of July 1 for each year. Figures for years prior to 1940 are total, including armed forces overseas. For subsequent years, the figures include only those eating out of civilian supplies.

Sources:

Cols. 1-7: U. S. Bureau of Agricultural Economics, Fruits (Non-Citrus) Production, Value and Utilization of Sales.

Col. 8: U. S. Bureau of Agricultural Economics, Consumption of Food in the United States, 1909-1952, and U. S. Agricultural Marketing Service, National Food Situation (1953 figure).

TABLE IX

Marriage Rate 1953 Versus 1940 and Number of Children Ever Born per 1,000 Women 1952 Versus 1940. By Age-Specific Groups

Age group	A. Marriage rate		
	Per cent of women married		Percentage increase in rate
	1953	1940	1940-1953
14-19 years	13.8	9.8	41
20-24 years	69.1	51.3	35
25-29 years	85.6	74.1	16
30-34 years	88.0	80.4	9
35-44 years	85.4	81.0	5
45-54 years	78.0	76.0	3
55-64 years	63.9	63.0	1
65-74 years	46.9	41.6	13
75 years and over	20.2	17.8	12
Total, 14 years and over	66.9	59.5	12

Age group	B. Number children ever born per 1,000 women			C. Number children ever born per 1,000 women ever married		
	1952	1940	Per cent increase 1940-1952	1952	1940	Per cent increase 1940-1952
15-19 years	98	68	44.1	572	567	0.9
20-24 years	836	513	63.0	1,187	969	22.5
25-29 years	1,527	1,090	40.1	1,742	1,408	23.7
30-34 years	1,943	1,613	20.5	2,130	1,888	12.8
35-39 years	2,112	2,095	0.8	2,293	2,357	- 2.7
40-44 years	2,169	2,478	-12.5	2,346	2,740	-14.4
45-49 years	2,172	2,735	-20.6	2,352	2,993	-21.4
50 years and over	2,707	3,014	-10.2	2,937	3,315	-11.4

Source: U. S. Bureau of the Census, Current Population Reports, Series P-20, Nos. 46 and 50.

TABLE X

Births and Birth Rate in the National Population

Period	Number of births	Crude birth rate (number of births per year per thousand population)
	millions	
1910-1914	14.3	29.8
1915-1919	14.6	28.4
1920-1924	14.8	26.8
1925-1929	13.8	23.2
1930-1934	12.3	19.7
1935-1939	12.1	18.8
1940-1944	14.3	21.2
1945-1949	17.4	24.1
1950-1954	19.0	24.1
1955-1959	17.9	21.0
1960-1964	17.6	19.4
1965-1969	18.4	19.2
1970-1974	19.2	19.1

Source: U. S. Bureau of the Census, Current Population Reports, Population Estimates, Series P-25, no. 78, (C Series used for projections after 1950).

TABLE XI

Total Population of the United States and Female Population Aged 20-39, from 1900 to 1950 and Projections to 1975

Year	Total Population	Increase from previous date		Female population (aged 20-39)	Total population and female population in each year expressed as percentage of population in 1950 1950 = 100	
					Total	Female
	thousands		per cent	thousands	per cent	
1900	75,995	13,047	20.7	11,919	50.4	50.0
1910	91,972	15,978	21.0	14,757	61.0	62.0
1920	105,711	13,738	14.9	16,940	70.1	71.0
1930	122,775	17,064	16.1	19,594	81.5	82.0
1940	131,669	8,894	7.2	21,513	87.3	91.0
1950	150,697	19,028	14.5	23,767	100.0	100.0
1955	164,644	13,947	8.5	23,530	109.2	99.0
1960	176,126	11,482	7.0	23,327	116.9	98.0
1965	186,146	10,020	5.7	23,766	123.5	100.0
1970	196,269	10,123	5.4	26,435	130.2	111.0
1975	206,615	10,346	5.3	30,338	137.1	128.0

Sources:

Data for 1900 to 1950--U. S. Bureau of the Census, U. S. Census of Population, 1950, vol. II, Characteristics of the Population, Part I, United States Summary, Tables 2 and 39.

Data for 1950 to 1975--U. S. Bureau of the Census, Current Population Reports, Population Estimates, Series P-25, No. 78, C Series of projections.

TABLE XII

Growth of Population in the United States, by Regions, Divisions, and States, 1940 to 1950 and 1950 to 1954
(Civilian Population in Thousands)

Region, division and state	1940 to 1950				1950 to 1954		
	April 1, 1950	April 1, 1940	Net change		July 1, 1954	Net change from April 1, 1950	
	number			per cent	number		per cent
United States	149,634	131,391	+18,242	+13.9	159,084	+9,450	+ 6.3
Northeast	39,344	35,929	+ 3,415	+ 9.5	41,029	+1,686	+ 4.3
New England	9,261	8,424	+ 837	+ 9.9	9,732	+ 471	+ 5.1
Maine	912	845	+ 67	+ 7.9	916	+ 4	+ 0.4
New Hampshire	531	491	+ 40	+ 8.1	528	- 4	- 0.7
Vermont	378	358	+ 20	+ 5.5	383	+ 6	+ 1.5
Massachusetts	4,665	4,312	+ 353	+ 8.2	4,906	+ 241	+ 5.2
Rhode Island	774	710	+ 65	+ 9.1	790	+ 16	+ 2.1
Connecticut	2,001	1,708	+ 293	+17.2	2,210	+ 209	+10.4
Middle Atlantic	30,083	27,505	+ 2,578	+ 9.4	31,297	+1,215	+ 4.0
New York	14,801	13,454	+ 1,346	+10.0	15,368	+ 567	+ 3.8
New Jersey	4,802	4,155	+ 647	+15.6	5,174	+ 372	+ 7.8
Pennsylvania	10,480	9,895	+ 585	+ 5.9	10,755	+ 275	+ 2.6
North Central	44,369	40,110	+ 4,258	+10.6	46,901	+2,533	+ 5.7
East North Central	30,337	26,604	+ 3,733	+14.0	32,427	+2,091	+ 6.9
Ohio	7,938	6,904	+ 1,034	+15.0	8,535	+ 596	+ 7.5
Indiana	3,932	3,425	+ 508	+14.8	4,203	+ 271	+ 6.9
Illinois	8,672	7,886	+ 787	+10.0	9,106	+ 434	+ 5.0
Michigan	6,361	5,253	+ 1,108	+21.1	7,010	+ 650	+10.2
Wisconsin	3,433	3,137	+ 296	+ 9.4	3,574	+ 140	+ 4.1
West North Central	14,032	13,506	+ 526	+ 3.9	14,474	+ 442	+ 3.1
Minnesota	2,981	2,790	+ 191	+ 6.8	3,098	+ 117	+ 3.9
Iowa	2,621	2,537	+ 84	+ 3.3	2,636	+ 15	+ 0.6
Missouri	3,952	3,784	+ 169	+ 4.5	4,115	+ 163	+ 4.1
North Dakota	620	642	- 22	- 3.5	635	+ 16	+ 2.6
South Dakota	650	643	+ 7	+ 1.1	659	+ 10	+ 1.5
Nebraska	1,322	1,314	+ 8	+ 0.6	1,358	+ 36	+ 2.8
Kansas	1,887	1,797	+ 90	+ 5.0	1,972	+ 85	+ 4.5

(Continued on next page.)

TABLE XII

Growth of Wheat, &c., in the United States, [illegible]
and Canada, 1870 to 1900 and 1870 to 1900
(William Population to Thousands)

[illegible]						
[illegible]						
[illegible]						
[illegible]						

Region, division, and state	1940 to 1950				1950 to 1954		
	April 1, 1950	April 1, 1940	Net change		July 1, 1954	Net change from April 1, 1950	
	number			per cent	number		per cent
South	46,653	41,543	+5,109	+12.3	49,214	+2,561	+ 5.5
South Atlantic	20,860	17,747	+3,113	+17.5	22,398	+1,538	+ 7.4
Delaware	318	266	+ 52	+19.6	362	+ 44	+13.8
Maryland	2,306	1,812	+ 495	+27.3	2,522	+ 216	+ 9.4
District of Columbia	769	657	+ 112	+17.1	820	+ 51	+ 6.6
Virginia	3,220	2,650	+ 570	+21.5	3,418	+ 197	+ 6.1
West Virginia	2,005	1,902	+ 103	+ 5.4	1,946	- 59	- 2.9
North Carolina	4,014	3,566	+ 448	+12.6	4,162	+ 147	+ 3.7
South Carolina	2,096	1,894	+ 201	+10.6	2,171	+ 76	+ 3.6
Georgia	3,402	3,109	+ 293	+ 9.4	3,561	+ 159	+ 4.7
Florida	2,729	1,892	+ 837	+44.3	3,436	+ 707	+25.9
East South Central	11,412	10,767	+ 645	+ 6.0	11,553	+ 141	+ 1.2
Kentucky	2,913	2,838	+ 75	+ 2.7	2,928	+ 14	+ 0.5
Tennessee	3,281	2,916	+ 366	+12.5	3,344	+ 63	+ 1.9
Alabama	3,053	2,830	+ 223	+ 7.9	3,100	+ 47	+ 1.5
Mississippi	2,164	2,184	- 19	- 0.9	2,180	+ 16	+ 0.7
West South Central	14,330	13,029	+1,351	+10.4	15,263	+ 883	+ 6.1
Arkansas	1,908	1,948	- 40	- 2.1	1,891	- 17	- 0.9
Louisiana	2,670	2,361	+ 309	+13.1	2,901	+ 231	+ 8.6
Oklahoma	2,218	2,331	- 113	- 4.9	2,232	+ 14	+ 0.6
Texas	7,584	6,389	+1,196	+18.7	8,240	+ 655	+ 8.6
West	19,269	13,808	+5,460	+39.5	21,940	+2,671	+13.9
Mountain	5,021	4,140	+ 881	+21.3	5,634	+ 613	+12.2
Montana	589	559	+ 30	+ 5.5	624	+ 35	+ 5.9
Idaho	588	525	+ 64	+12.1	611	+ 23	+ 3.9
Wyoming	282	246	+ 36	+14.5	302	+ 20	+ 7.2
Colorado	1,307	1,120	+ 187	+16.7	1,408	+ 101	+ 7.7
New Mexico	668	532	+ 136	+25.6	752	+ 85	+12.7
Arizona	742	498	+ 244	+49.0	974	+ 232	+31.3
Utah	687	550	+ 137	+25.0	753	+ 65	+ 9.5
Nevada	157	110	+ 47	+42.8	209	+ 52	+33.1
Pacific	14,248	9,669	+4,579	+47.4	16,306	+2,058	+14.4
Washington	2,317	1,722	+ 594	+34.5	2,459	+ 142	+ 6.1
Oregon	1,519	1,089	+ 430	+39.5	1,634	+ 116	+ 7.6
California	10,413	6,858	+3,555	+51.8	12,213	+1,800	+17.3

Source: U. S. Bureau of the Census, Current Population Reports, Population Estimates, Series P-25, nos. 72 and 104.

Region, division, and state	April 1, 1950	April 1, 1940	1940 to 1950 Net change		July 1, 1954	1950 to 1954 Net change from April 1, 1950	
	number		number	per cent	number	number	per cent
South	46,653	41,351	+5,302	+12.3	49,221	+2,568	+ 5.5
South Atlantic	20,860	17,717	+3,143	+17.5	22,398	+1,538	+ 7.4
Delaware	318	266	+ 52	+19.6	362	+ 44	+13.8
Maryland	2,306	1,812	+ 495	+27.3	2,522	+ 216	+ 9.4
District of Columbia	769	657	+ 112	+17.1	820	+ 51	+ 6.6
Virginia	3,220	2,650	+ 570	+21.5	3,418	+ 197	+ 6.1
West Virginia	2,005	1,902	+ 103	+ 5.4	1,916	- 59	- 2.9
North Carolina	4,021	3,566	+ 455	+12.6	4,162	+ 141	+ 3.4
South Carolina	2,056	1,891	+ 201	+10.6	2,172	+ 76	+ 3.6
Georgia	3,402	3,209	+ 293	+ 9.4	3,561	+ 152	+ 4.7
Florida	2,729	1,892	+ 837	+44.3	3,426	+ 707	+25.9
East South Central	11,412	10,176	+ 616	+ 6.0	11,553	+ 141	+ 1.2
Kentucky	2,913	2,838	+ 75	+ 2.7	2,928	+ 14	+ 0.5
Tennessee	3,281	2,916	+ 366	+12.5	3,344	+ 63	+ 1.9
Alabama	3,053	2,830	+ 223	+ 7.9	3,100	+ 47	+ 1.5
Mississippi	2,161	2,181	- 19	- 0.9	2,180	+ 16	+ 0.7
West South Central	14,370	13,029	+1,351	+10.4	15,263	+ 893	+ 6.1
Arkansas	1,908	1,918	- 10	- 2.1	1,891	- 17	- 0.9
Louisiana	2,670	2,361	+ 309	+13.1	2,901	+ 231	+ 8.6
Oklahoma	2,218	2,331	- 113	- 4.9	2,232	+ 14	+ 0.6
Texas	7,584	6,389	+1,196	+18.7	8,241	+ 657	+ 8.6
West	19,269	13,808	+5,460	+39.5	21,940	+2,671	+13.9
Mountain	5,021	4,110	+ 881	+21.3	5,634	+ 613	+12.2
Montana	589	559	+ 30	+ 5.5	624	+ 35	+ 5.9
Idaho	588	525	+ 64	+12.1	611	+ 23	+ 3.9
Wyoming	282	246	+ 36	+14.5	302	+ 20	+ 7.2
Colorado	1,307	1,120	+ 187	+16.7	1,408	+ 101	+ 7.7
New Mexico	668	532	+ 136	+25.6	752	+ 85	+12.7
Arizona	742	498	+244	+49.0	771	+ 232	+31.3
Utah	687	550	+ 137	+25.0	753	+ 65	+ 9.5
Nevada	157	110	+ 47	+42.8	209	+ 52	+33.1
Pacific	14,248	9,698	+4,549	+47.4	16,306	+2,058	+14.4
Washington	2,379	1,722	+ 594	+34.5	2,582	+ 202	+ 6.1
Oregon	1,729	1,389	+ 430	+29.5	1,836	+ 176	+ 7.6
California	10,140	6,588	+3,552	+53.8	12,288	+1,680	+17.3

Source: U. S. Bureau of the Census, Current Population Reports, Population Estimates, Series P-25, nos. 72 and 104.